

حمل الآن

مجاناً وحصرياً

المراجعة رقم (1)

اختبار شهر نوفمبر



1. Choose the correct answer.

1. Which of the following is a numeric expression ? [Cairo - El Salam 24]
 A. $12 \div 3 + 5$ B. $5x - 1$ C. $2y + 3$ D. $4z - 1$
2. Which of the following is an algebraic expression ? [Alexandria - El Montaza 24]
 A. $3^2 - 6$ B. $5x + 4$ C. $28 - 3^3$ D. $3[3 + 9]$
3. Which of the following is NOT a numeric expression ? [Kafir El Sheikh - Bayala 24]
 A. $5x + 3$ B. $5^2 + 4$ C. $3 - 1^2$ D. $3 \times 5 + 1$
4. In the algebraic expression : $3y + 6$, the coefficient is _____ [El Menia - Matay 24]
 A. 6 B. 3 C. y D. 36
5. In the algebraic expression : $7 + 3x$, the coefficient is _____ [Cairo 24]
 A. 7 B. $3x$ C. 3 D. -7
6. The constant in the expression : $3x + 7$ is _____ [Kafir El Sheikh 24]
 A. 2 B. 3 C. 7 D. x
7. The constant in the expression : $2a + 7 + 4a$ is _____ [Port Said 24]
 A. 2 B. 4 C. 7 D. a
8. The constant in the expression : $z - 2y + 5x + 3$ is _____ [El Monofia - El Shohada 24]
 A. $5x$ B. $2y$ C. z D. 3
9. The number of terms of the expression : $x + 12$ is _____ [Alexandria - El Montaza 24]
 A. 2 B. 3 C. 1 D. 5
10. The number of terms of the expression : $3x + 2y + 5$ is _____ [Cairo - Rod El Farg 24]
 A. 5 B. 3 C. 2 D. 1
11. The algebraic expression which consists of 3 terms is _____ [El Menia - Mallawi 24]
 A. $2s + k + 7$ B. abc C. $11r$ D. 3
12. The number of like terms in the expression : $4n + 4 + 3m + 2$ is _____ [Kafir El Sheikh 24]
 A. 1 B. 2 C. 3 D. 4
13. The like terms in the expression : $2x + 3x + 8$ are _____ [Giza - 6th October 24]
 A. $2x$ and 8 B. $2x$ and $3x$ C. $3x$ and 8 D. 8 and 3
14. Which of the following are like terms ? [El Monofia - Sers El Layan 24]
 A. $3x$ and $3y$ B. xy and yz C. $31x$ and $13x$ D. x and y
15. The age of Bassam now is x years , then his age after 3 years is _____ [Cairo - El Nouzha 24]
 A. $x - 3$ B. x C. $3x$ D. $x + 3$
16. Twice a number subtracted from it the number 5 is written as _____ [Cairo - El Maadi 24]
 A. $2[x - 5]$ B. $5 - 2x$ C. $2[5 - x]$ D. $2x - 5$

17. 7 less a number k is written as _____
 A. $k - 7$ B. $7 - k$ C. $7 + k$ D. $\frac{k}{7}$ [El Monofia - Tala 24]
18. If we subtract 5 from the number x , we get _____
 A. $x + 5$ B. $5x$ C. $5^2 + x$ D. $x - 5$ [Port Said 24]
19. 4 times a number less than 6 is written as _____
 A. $4x + 6$ B. $6 - 4x$ C. $x^2 - 6$ D. $4x - 6$ [Cairo 24]
20. $5 \times 5 \times 5 \times 5 = 5$ _____
 A. 2 B. 3 C. 4 D. 20 [Luxor 24]
21. The base in the exponential expression 9^2 is _____
 A. 9 B. 2 C. 9^2 D. otherwise. [Aswan 24]
22. $2^3 =$ _____
 A. $2 \times 2 \times 2$ B. 3×3 C. 3^2 D. 3×2 [Cairo - El Mokattam 24]
23. Five squared = _____
 A. 2^5 B. 5^2 C. 5^5 D. 2^2 [El Fayoum 24]
24. 8 cubed = _____
 A. 8×8 B. 8^3 C. $8 + 8$ D. 8×3 [Ismailia 24]
25. Three squared add to five cubed equals _____
 A. $3 \times 3 + 5 \times 5$ B. $3^2 + 5^3$ C. $3^3 + 5^2$ D. $3^3 + 2^5$ [Giza 24]
26. The first operation you perform in : $20 \div 5 + [7 - 2]^2$ is _____
 A. addition. B. subtraction. C. exponent. D. division. [Alexandria - El Montaza 24]
27. The first operation you perform in the expression : $6 + 12 - 2 \times 2^2$ is _____
 A. addition. B. multiplication. C. subtraction. D. exponent. [Cairo - New 24]
28. $24 \div 2^3 + 1 =$ _____
 A. 4 B. 5 C. 6 D. 11 [El Monofia - Menof 24]
29. The value of the expression : $5n - 2$ for $n = 1$ is _____
 A. 5 B. 3 C. -2 D. 1 [Cairo - Rod El Farag 24]
30. What expression is equivalent to : $2x + 10$?
 A. $2(x + 5)$ B. $12x$ C. $20x$ D. $2x + 5 + 2$ [Cairo - Rod El Farag 24]
31. All the following expressions are equivalent except _____
 A. $4x + 8$ B. $2(2x + 4)$ C. $4(x + 4)$ D. $4(x + 2)$ [El Monofia - Tala 24]

2. Complete the following.

1. $5[3 + 4]$ is called _____ expression. [El Menia - Mallawi 24]
2. In the algebraic expression : $2n + 7$, the coefficient is _____. [El Beheira 24]
3. The constant in the algebraic expression : $5x + 3b + 4$ is _____. [El Fayoum 24]

4. The like terms in the algebraic expression : $6x + 3x + 3$ are _____ [Aswan 24]
5. The age of Ahmed now is x years , then his age after 5 years is _____ [El Monofia - Tala 24]
6. 10 less a number is written as _____ [Cairo - El Nouzha 24]
7. The verbal form of : a^2 is _____ [Cairo - El Mostabal 24]
8. The verbal expression of : $2m - 7$ is _____ [El Fayoum 24]
9. The variable in the expression : $5a + 3$ is _____ [El Monofia - El Sadat 24]
10. In 7^2 , the base is _____ and the exponent is _____ [Cairo - New 24]
11. $9 \times 9 \times 9 \times 9 = 9$ _____ [Alexandria - Middle 24]
12. $3^3 =$ _____ [Alexandria - El Gamarek 24]
13. $20 \div 4 + 3 \times 5 - 5 =$ _____ [El Beheira - Kafr El Dawar 24]
14. $[3^2 + 4] \div 13 =$ _____ [El Fayoum 24]
15. The value of the expression : $2x + 3$ for $x = 5$ is _____ [Cairo 24]

3. Answer the following questions.

1. Use the order of mathematical operations to simplify :

A. $4 + 3^2 \times 2 \div [5 + 1]$

[El Monofia - El Bagour 24]

B. $25 + 12 - 2^2 + [5^2 - 20]$

[Alexandria - Borg El Arab 24]

2. Write the algebraic expression : the sum of 2 times x and 5

[Cairo - El Sahel 24]

3. Evaluate the expression :

A. $6 + [8x - 3]$ when $x = 1$

[Aswan 24]

B. $5x^2 + 8 \div [6 - 4] \div 2$ at $x = 3$

[Kafr El Sheikh - Bayala 24]

4. Check the following expressions are equivalent or not ?

$2 + 8x$ and $3 + 2[x + 4]$

1. Choose the correct answer.

1. " $2s + 1 = 5$ " represents _____

- A. a numeric expression.
C. an equation.

- B. an algebraic expression.
D. an inequality.

[El Beheira - Kafr El Dawar 24]

2. If $y + 4 = 15$, then $y =$ _____

- A. 18 B. 12

C. 11

D. 10

[Alexandria - El Gamarek 24]

3. If $x - 3 = 5$, then $x =$ _____

- A. 2 B. 3

C. 5

D. 8

[Cairo 24]

4. If $3a = 12$, then $a =$ _____

- A. 12 B. 9

C. 36

D. 4

[Assiut 24]

5. If $\frac{x}{2} = 3$, then $x =$ _____

- A. 2 B. 3

C. 6

D. 1.5

[Giza 24]

6. If $x + 3 = 5$, then $3x =$ _____

- A. 5 B. 8

C. 6

D. 1

[Assiut 24]

7. If $80 - m = 15$, then $m =$ _____

- A. 10 B. 65

C. 95

D. 56

[Cairo 24]

8. if $x + x = 12$, then $x =$ _____

- A. 1 B. 2

C. 6

D. 24

[El Menia - Matay 24]

9. Which of the following is an inequality ?

- A. $x + 2$ B. $x - 4 = y$ C. $x < 7$

D. $[20 \div 5]^2$

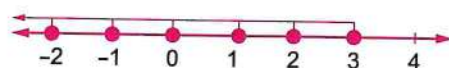
[El Monofia - El Sadat 24]

10. The inequality that represented

by the opposite number line is _____

- A. $x > 3$ B. $x \geq 3$

- C. $x < 3$ D. $x \leq 3$



[Giza - Abo El Nomrous 24]

11. The inequality which represents the numbers greater than 3 is _____

- A. $x > 3$ B. $x < 3$ C. $x \geq 3$ D. $x \leq 3$

[Cairo - El Salam 24]

12. The inequality representing negative numbers is _____

- A. $x > 0$ B. $x < 0$ C. $x \leq 0$ D. $x \geq 0$

[Alexandria - Middle 24]

13. Number of solutions of inequality : $x > -4$ in integers is _____

- A. 4 B. -4 C. 0 D. infinite.

[Cairo - El Mostabal 24]

14. _____ is one of solutions of $x < -1$

- A. 0 B. 1 C. -2 D. 3

[El Monofia - Menof 24]

15. The number _____ is one of solutions of the inequality : $x \leq 4$ [El Fayoum 24]
 A. 10 B. -1 C. 12 D. 5
16. All the following are solutions of the inequality : $x < -1$ except _____ [El Kalyoubia 24]
 A. -5 B. -4 C. -3 D. -1

2. Complete the following.

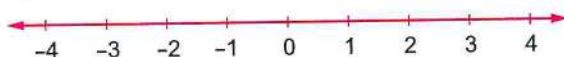
1. If $k + 1 = 5$, then $k - 3 =$ _____ [Assiut 24]
 2. If $m - 2 = 7$, then $m + 1 =$ _____ [Cairo 24]
 3. If $7x = 0$, then $21x =$ _____ [Cairo - El Mostabal 24]
 4. The equation that represents the opposite figure is _____
-
5. If $\frac{2}{5}x = \frac{2}{5}$, then $x =$ _____ [El Beheira 24]
 6. The value of x in the equation : $\frac{1}{2}x = 4$ is _____ [El Kalyoubia 24]
 7. If $|-9| = x$, then $x =$ _____ [Cairo - El Salam 24]
 8. If $6y = 18$, then $\frac{1}{3}y =$ _____ [Port Said - Port Fouad 24]
 9. The smallest solution of the inequality : $x \geq -5$ is _____ [Cairo - Rod El Farag 24]
 [Alexandria - El Montaza 24]

3. Answer the following questions.

1. Solve each of the following equations :
 A. $9 + y = 16$ [Cairo 24]
 B. $x - 3 = 12$ [El Kalyoubia 24]
 C. $y - 0.2 = 0.8$ [El Monofia - Shebin El Kom 24]
 D. $5t = 20$ [Giza - Awseem 24]
 E. $x + 17 = 29$ [Ismailia 24]

2. Find 4 possible solutions for the inequality :
 $x \geq -2$ in the integer numbers. [Cairo 24]

3. Represent the following inequality on the number line : $x \geq 2$ [Giza - Abo El Nomrous 24]



November Test 1



(5 marks)

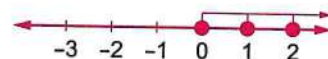
1. Choose the correct answer.

- a. If $x + 3 = 5$, then $4x =$ _____
 A. 2 B. 4 C. 8 D. 32
- b. The value of the expression : $4n - 5$ if $n = 2$ is _____
 A. 1 B. 3 C. 37 D. 12
- c. In the equation : $4a + 9 = m$, then independent variable is _____
 A. 4 B. a C. 9 D. m
- d. The algebraic equation of "add 3 to the product of 5 and x equals y" is _____
 A. $3 + x = y$ B. $5x + 3 = y$ C. $3x + 5 = y$ D. $35 + x = y$
- e. All the following are solutions of the inequality $x < 0$ except _____
 A. -1 B. $-|-3|$ C. $|-4|$ D. -5

2. Complete the following.

(5 marks)

- a. The ordered pair (4, _____) satisfies the equation : $y = 2x + 1$
- b. The inequality that represented by the opposite number line in the set of integers is _____
- c. $7 \times 7 \times 7 \times 7 = 7$ _____
- d. In the equation : $y = x + 3$, if the output is 10, then the input is _____
- e. The greatest solution of the inequality $x \leq -2$ is _____

3. a. Use order of operations and exponent to simplify : $2 \times 5 + (6^2 - 24 \div 2)$ (3 marks)

b. Write an equation. Use the variables x and y, where x is the independent.

Using the rule "Add 3", then substitute $x = \frac{1}{2}$ to evaluate y

(2 marks)

November Test 2

Total mark
15

(5 marks)

1. Choose the correct answer.

- a. "k equals the product of l and 8" as an equation is _____
 A. $k = 8l$ B. $k = 8 + l$ C. $l = 8k$ D. $l = 8 + k$
- b. The cube of 6 equals _____
 A. 3×6 B. $6 + 3$ C. 6^3 D. 3^6
- c. If $3x = 27$, then $x =$ _____
 A. $27 + 3$ B. $27 - 3$ C. 27×3 D. $27 \div 3$
- d. In the rule: $y = x + 4$, if $x = 1$, then y would be _____
 A. 3 B. 5 C. 4 D. 2
- e. The first operation you perform in the expression: $5 \times (3^2 - 2) + 7$ is the _____
 A. multiplication. B. exponent. C. subtraction. D. addition.

2. Complete the following.

(5 marks)

- a. If $x + 3 = 10$, then $x + 2 =$ _____
- b. In the rule: $5x + 1 = y$, then dependent variable is _____
- c. The verbal expression of " $x + 10 = y$ " is _____
- d. The ordered pair (_____, 2) satisfies the algebraic equation: $y = x + 1$
- e. The smallest solution of the inequality $x \geq 5$ is _____

3. a. Examine these two expressions: $3(x + 1)$ and $2x + x + 3$

(2 marks)

1. Try to find a value of x that will make these expressions equal.
2. Decide if these two expressions are always equal and if they should be considered equivalent expressions.

b. Find three solutions for the inequality: $x \leq -1$

(3 marks)

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



حمل الآن

مجاناً وحصرياً

المراجعة رقم (2)

اختبار شهر نوفمبر



1 Choose the correct answer:

2

a Which of the following represents an algebraic expression?

a) $3 \times 4 + 2$

b) $3x - 2$

c) $7 + 2 \times 2$

d) $8 \div 4 - 2$

b The inequality that represents "A number more than or equal to -2 " is

a) $x > 2$

b) $x \geq -2$

c) $x \leq 2$

d) $x < -2$

2 Answer each of the following:

8

a Evaluate the expression: $6 + (8x - 3)$, when $x = 1$.

.....

b Find 4 possible solutions for the inequality: $x \leq -4$ in the set of integers.

.....

c From the algebraic expression: $4 + 2m - 5a$, complete:

- The number of terms:

- The constant:

- The coefficients:

d Use the order of mathematical operations to simplify:

$$25 + 12 - 2^2 + (5^2 - 20)$$

.....

1 Choose the correct answer:

2

- a The smallest solution of the inequality: $x \geq -7$ is
- a) -8 b) -7 c) -6 d) -9
- b 8^2 is equivalent to:
- a) $2 \times 2 \times 2 \times 2 \times 2$ b) 8×8 c) 8×2 d) 16

2 Answer each of the following:

8

- a Solve the following equations:

1. $4 + x = 16$

2. $y - 0.2 = 0.12$

.....

.....

.....

- b Represent the inequality: $x > -1$ on the number line in the set of integers:



- c Evaluate the expression: $5x^2 + 8 \div (6 - 4) \div 2$ when $x = 3$:

.....

.....

.....

- d Check if the following expressions are equivalent or not at $b = 2$:

$5(1 + b)$, $5b + 1$

.....

.....

.....

1 Choose the correct answer:

- a) The coefficient of the algebraic expression: $\frac{x}{2} + 2$ is
- a) 2 b) x c) $\frac{x}{2}$ d) $\frac{1}{2}$
- b) The first operation you perform in the expression: $6 + 12 - 2 \times 2^2$ is
- a) addition b) multiplication c) subtraction d) exponent

2 Answer each of the following:

- a) Arrange the following values in ascending order.

$$2^3, |-5|, -8, 0, -5$$

The order is:

- b) Solve each of the following equations:

1) $5t = 20$

2) $x + 17 = 29$

.....
.....
.....

.....
.....
.....

- c) If Hazem has x pounds, and his father gave him 100 pounds, write an algebraic expression to represent this. If Hazem originally has 50 pounds, how much does he have now?

.....
.....
.....

- d) A sign in an amusement park shows that the height allowed to ride the electric train is from 90 cm to 113 cm with a companion. Mention 3 allowed heights and 3 not allowed heights.

.....
.....
.....

1 Choose the correct answer:

- a) Which of the following represents an algebraic expression?
- a) $3 \times 4 + 2$ b) $3x - 2$ c) $7 + 2 \times 2$ d) $8 \div 4 - 2$
- b) The inequality that represents "A number more than or equal to -2 " is
- a) $x > 2$ b) $x \geq -2$ c) $x \leq 2$ d) $x < -2$

2 Answer each of the following:

- a) Evaluate the expression: $6 + (8x - 3)$, when $x = 1$.
- At $x = 1$,
- $$6 + (8x - 3) = 6 + (8 \times 1 - 3)$$
- $$= 6 + 5$$
- $$= 11$$
- b) Find 4 possible solutions for the inequality: $x \leq -4$ in the set of integers.
- The solutions are may be: $-4, -5, -6, -7$.
- c) From the algebraic expression: $4 + 2m - 5a$, complete:
- The number of terms:3.....
 - The constant:4.....
 - The coefficients:2, -5.....
- d) Use the order of mathematical operations to simplify:

$$25 + 12 - 2^2 + (5^2 - 20)$$

$$\begin{aligned}
 &25 + 12 - 2^2 + (5^2 - 20) \\
 &= 25 + 12 - 4 + (25 - 20) \\
 &= 25 + 12 - 4 + 5 \\
 &= 37 - 4 + 5 \\
 &= 33 + 5 \\
 &= 38
 \end{aligned}$$

1 Choose the correct answer:

- a The smallest solution of the inequality: $x \geq -7$ is
 a) -8 b) -7 c) -6 d) -9
- b 8^2 is equivalent to:
 a) $2 \times 2 \times 2 \times 2 \times 2$ b) 8×8 c) 8×2 d) 16

2 Answer each of the following:

- a Solve the following equations:

1. $4 + x = 16$

$x = 16 - 4$

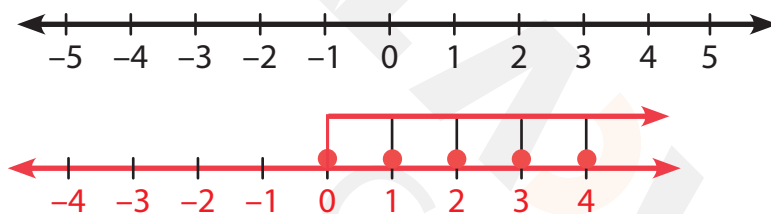
$x = 12$

2. $y - 0.2 = 0.12$

$y = 0.12 + 0.2$

$y = 0.32$

- b Represent the inequality: $x > -1$ on the number line in the set of integers:



- c Evaluate the expression: $5x^2 + 8 \div (6 - 4) \div 2$ when $x = 3$:

At: $x = 3$

► $5(3)^2 + 8 \div (6 - 4) \div 2$

$= 5 \times 9 + 8 \div 2 \div 2$

$= 45 + 8 \div 2 \div 2$

$= 45 + 4 \div 2$

$= 45 + 2 = 47$

- d Check if the following expressions are equivalent or not at $b = 2$:

$5(1 + b)$, $5b + 1$

At: $b = 2$

► $5(1 + b) = 5(1 + 2)$

$= 5 \times 3 = 15$

► $5b + 1 = 5 \times 2 + 1 = 10 + 1 = 11$,

then the two expressions aren't equivalent.

1 Choose the correct answer:

- a) The coefficient of the algebraic expression: $\frac{x}{2} + 2$ is
- a) 2 b) x c) $\frac{x}{2}$ d) $\frac{1}{2}$
- b) The first operation you perform in the expression: $6 + 12 - 2 \times 2^2$ is
- a) addition b) multiplication c) subtraction d) exponent

2 Answer each of the following:

- a) Arrange the following values in ascending order.

$$2^3, |-5|, -8, 0, -5$$

$$-8, -5, 0, |-5|, 2^3$$

- b) Solve each of the following equations:

1) $5t = 20$

2) $x + 17 = 29$

1) $\frac{5}{5} t = \frac{20}{5}$

2) $x = 29 - 17$

$t = 4$

$x = 12$

the solution is 4

the solution is 12

- c) If Hazem has x pounds, and his father gave him 100 pounds, write an algebraic expression to represent this. If Hazem originally has 50 pounds, how much does he have now?

The algebraic expression is: $x + 100$

If Hazem has 50 pounds,

then he has now = $100 + 50 = 150$ pounds.

- d) A sign in an amusement park shows that the height allowed to ride the electric train is from 90 cm to 113 cm with a companion. Mention 3 allowed heights and 3 not allowed heights.

The allowed heights: 90 cm, 100 cm, 113 cm

The not allowed heights: 85 cm, 120 cm, 70 cm

حمل الآن

مجاناً وحصرياً

المراجعة رقم (3)

اختبار شهر نوفمبر



Assessment

on Unit

3



First: Choose the correct answer:

- a The algebraic term "5ab" is from factors. (1 or 2 or 3 or 4)
- b The number of terms that makes up the algebraic expression " $3x^2y + 2x - 5$ " is term. (2 or 3 or 4 or 5)
- c The absolute term in " $3m + 2$ " is (2 or 3 or m or 3m)
- d Subtracting the number 3 from twice the number $y =$
($3 - 2y$ or $2(y - 3)$ or $3y - 2$ or $2y - 3$)
- e Samah is now 25 years old. How old was she h years ago?
($25 - h$ or $h - 25$ or $25 - h$ or $25h$)
- f $5 \times 5 \times 5 =$
(5×3 or 5^3 or 3^5 or $5 + 3$)
- g $3^2 + 4$ $9 + 2^2$ ($>$ or $=$ or $<$ or $\leq$)
- h If the price of one book is 15 pounds, what is the price of b number of books?
($15b$ or $15 - b$ or $b - 15$ or $b + 15$)
- i The value of $(12 - x^3) \div 2$ if $x = 2$ is (8 or 10 or 2 or 6)
- j The order that is used to find the value of $2 + 3(m^2 - 5)$ if $m = 3$ is
(putting exponents in their simplest form, subtraction, multiplication, addition
or addition, exponents, subtraction, multiplication
or putting the exponents in the simplest form, addition, subtraction, multiplication
or multiplication, addition, exponents in simplest form, subtraction)

Second: Complete the following:

- a If the sum of two integers is S and one of them is 10, then the other number is
- b In $7xy$, the coefficient is
- c Like terms for " $3n + 3 + 2n$ " are
- d Twice of subtracting 5 from the number $w =$

Final Revision

- e** The verbal form for " $3x - 5$ " is
- f** Ahmed's car consumes " n " liters of fuel to travel a distance of 100 km. How many liters does the car need to travel a distance of 600 km?
- g** The value of " $4 \times (y^3 - 7)$ " If $y = 3$ is
- h** $3 \times 3 \times 3 \times 3 \times 3 \times 3 =$
- i** $5 \div 5 = 1$
- j** $4 \div 4 = 4$

Third: Answer the following:

- 1** Moataz saved " n " pounds per day for 9 days, then he got 20 pounds from his father.
- a** Write an algebraic expression that expresses the amount that Moataz has now:
- b** Complete using the preceding algebraic expression:
- 1** The number of terms of an algebraic expression is
 - 2** The coefficients are
 - 3** The constants are
- 2** Find the value of each of the following two algebraic expressions using the numbers shown, then indicate if these expressions are equivalent or not :

	$2x + 1$	$5x - 4$	Equal or Not?
If $x = 5$			
If $x = 3$			

From the previous table, we find that the two algebraic expressions are
(Equivalent or Not).

Assessment on Unit 4



First: Choose the correct answer:

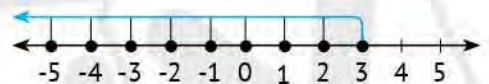
- a If $a + 3 = 7$, then $a =$ (7 or 3 or 10 or 4)
- b If $b = 6$, then $b -$ = 2. (4 or 8 or 2 or 3)
- c If $5x = 40$, then $x =$ (35 or 45 or 8 or 200)
- d If $y = 6$, then $\frac{y}{\text{.....}} = 2$. (3 or 8 or 12 or 4)
- e The inequality that represents all values "greater than 4" is
($x > 4$ or $x < 4$ or $x \leq 4$ or $x \geq 4$)

- f The inequality that represents all values
"less than or equal to -2" is
($x > -2$ or $x < -2$ or $x \leq -2$ or $x \geq -2$)

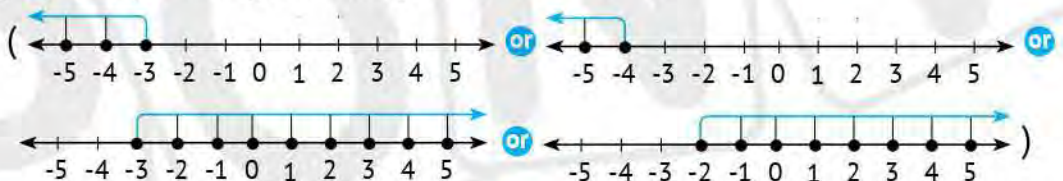
- g The inequality that represents all negative numbers are
($x > 0$ or $x < 0$ or $x \leq 0$ or $x \geq 0$)

- h Which of the following is a solution to the inequality $x < -6$?
(5 or -5 or -7 or 7)

- i The inequality represented by
the corresponding graph is
($x > 4$ or $x < 4$ or $x \leq 4$ or $x \geq 4$)



- j The graph expressing the inequality " $x < -3$ " is



Second: Complete all of the following:

- a If $x + 7 = 9$, then $x =$ b If $4m = 20$, then $m =$
- c If $b = 12$, then $b -$ = 8. d If $d = 3$, then $\times d = 18$.

Final Revision

e If $k = 6$, then $2 = \dots \div k$.

f The equation that represents the corresponding model is $\dots$.



g The inequality that represents all values "less than -6 " is $\dots$.

h The inequality that represents all values "greater than or equal to 3 " is $\dots$.

i The inequality that represents all positive integers are $\dots$.

j The similarities between the graphs of the two algebraic expressions $x = 9$ and $x \geq 9$ are $\dots$.

Third: Answer the following:

1 Find the value of the variable in each of the following equations:

a $x - 5 = 4$

= $\dots$

= $\dots$

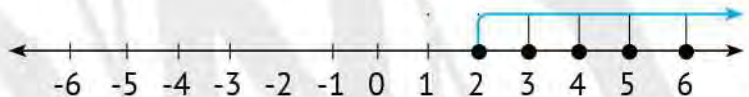
b $4x = 24$

= $\dots$

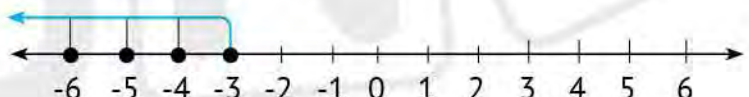
= $\dots$

2 Use the following number line to write inequalities:

a



b



حمل الآن

مجاناً وحصرياً

المراجعة رقم (4)

اختبار شهر نوفمبر



Unit 3

Q1 Choose the correct answer :-

- 1) Which of the following is an algebraic expression
- a) $44-3 \times 4$ b) $3+7-0$ c) $15a-32$ d) $2(3-4)$
- 2) The number of like terms in the expression $3 = 2x + 5$ is
- a) 1 b) 2 c) 3 d) 4
- 3) Which of the following are like terms ?
- a) 25 , 52 b) l , m c) ab , aq d) ab , ac
- 4) $2 + 3$ (.....) complete to get numeric expression
- a) a b) x c) $20 - 15$ d) $a + x$
- 5) Twice the difference of a number and 5 is
- a) $2Y + 5$ b) $2Y - 5$ c) $2(Y - 5)$ d) $2(Y + 5)$
- 6) Yara saved n L.E. and her mother gave her 5 L.E. she will have
- a) $n - 5$ b) $n + 5$ c) $5 - n$ d) $5n$
- 7) Nada is X years old now how old will she be after 6 years ?
- a) $x - 6$ b) $6x$ c) $6 + x$ d) $6 - x$
- 8) $5^4 =$
- a) 4^5 b) 4×5 c) $5 \times 5 \times 5 \times 5$ d) $4 \times 4 \times 4 \times 4$
- 9) The value of the expression $3n - 2$ for $n = 7$ is
- a) 14 b) 19 c) 21 d) 23
- 10) The first operation you perform in the expression $5(3^2 - 2) + 7$ is
- a) add b) multiply c) subtract d) exponent
- 11) The value of the expression $2X^2 - (3 \times 4 + 2^3) =$ at $X = 5$
- a) 50 b) 30 c) 40 d) 35

12) $8 - 3 \times 2 \div (4 - 2)^2 = \dots\dots\dots$

- a) 2.5 b) 1 c) 0.5 d) 6.5

13) Two cubed added to 5 squared equals = $\dots\dots\dots$

- a) $2 \times 3 + 5 \times 5$ b) $3^2 + 2^5$ c) $2^3 + 5^2$ d) $2^3 + 5^4$

14) The coefficient in the expression $6 - 3 + 5X$ is $\dots\dots\dots$

- a) 6 , 3 b) $5X$ c) 5 d) X

15) Number of like terms in the expression $4a + 4b + 5$ is $\dots\dots\dots$

- a) 3 b) 2 c) 1 d) 0

16) Subtract 8 from the number k in algebraic form $\dots\dots\dots$

- a) $8 - k$ b) $k - 8$ c) $8 + k$ d) $8k$

17) Marwan has 50 L.E. he bought 3 pens each for k L.E. then the remainder is $\dots\dots\dots$

- a) 30 b) $3 + 50k$ c) $50 - 3k$ d) $50 + 3k$

18) Take away twice the number k from 15 is written as $\dots\dots\dots$

- a) $2k - 15$ b) $15 + 2k$ c) $15 - 2k$ d) $15 - k^2$

19) 5 times a number less 7 is $\dots\dots\dots$

- a) $5b + 7$ b) $5b - 7$ c) $7 - 5b$ d) $7 - b^2$

20) The value of the expression $5 + (X^2 - 3) = \dots\dots\dots$ at $X = 3$

- a) 6 b) 9 c) 12 d) 11

Q2 Complete the following :-

- 1) The constant in the expression $2X + 5$ is
- 2) The number of terms in expression $5 - 2m - 3m - 4$ is terms
- 3) The coefficient in the algebraic expression $4X + 3$ is
- 4) $5 (4 + 6)$ is expression
- 5) $2m - 3$ is expression
- 6) The verbal expression for $2m - 7$ is
- 7) The algebraic expression for a number less 7 is
- 8) Seif works X hours daily , then the algebraic expression for the number of worked hours monthly is
- 9) Write the algebraic expression for subtract 7 from the double of number X
.....
- 10) Write the algebraic expression for 8 decreased by 3 times a number M
.....
- 11) Write the algebraic expression for twice the sum of a number and 3
- 12) The value of expression $4 (3X + 1) =$ at $X = 1$
- 13) Five squared =
- 14) If the price of a piece of tart is 18 L.E , then the algebraic expression represent the price of n pieces is
- 15) If the base is 7 , the exponent is 5 then the exponential form is
- 16) $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 = 3$
- 17) Area of the square whose side length 7 cm in the exponential form is
.....
- 18) The volume of cube whose edge length 5 cm is
- 19) 5 cubed =

Q3 Answer the following :-

- 1) If Farida has 25 LE in her money box , she will save 20 LE daily .
- a- What algebraic expression represents the situation ?
 - b- How much money in the money box after 3 days ?

- 2) Examine these two expressions and determine if they are equal .

$4(x+1)$ and $4x + 1$

Unit 4

Q1 Choose the correct answer :-

1) If $25 \div b = 5$, then $b =$

- a) 20 b) 5 c) 40 d) 1

2) If $3X = 12$, then $\frac{1}{2} X =$

- a) 9 b) 6 c) 4 d) 2

3) If $y \div 2 = 8$, then $\frac{1}{4} y =$

- a) 8 b) 6 c) 4 d) 2

4) A number if added to 17 , the sum is 28 then the number is

- a) 11 b) 18 c) 45 d) 18

5) A product of a number x and 6 is 42 , then $x =$

- a) 6 b) 7 c) 48 d) 36

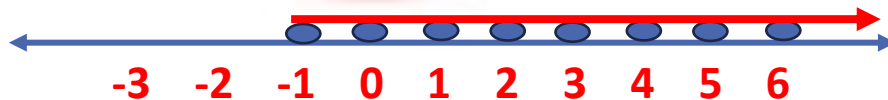
6) Which of the following is a solution of inequality $m \geq -1$?

- a) -2 b) -3 c) -4 d) 0

7) All of the following are solutions of inequality $m < -3$ except

- a) -2 b) -10 c) -5 d) -6

8) The inequality that represent the graph is



- a) $k < -1$ b) $k > -1$ c) $k \leq -1$ d) $k \geq -1$

9) Number of solutions of inequality $s > 10$ is

- a) 2 b) 1 c) 0 d) infinite

10) is a solution of $x < 4$

- a) 3.96 b) 4 c) 4.23 d) 5

11) All of the following are solutions of inequality $m > -3$ except

- a) $|-4|$ b) -3 c) 4 d) 5

12) If $3x = 0$, then $\frac{1}{2}x =$

- a) 3 b) -3 c) $1\frac{1}{2}$ d) 0

13) Mohamed has 47 pounds , his friend has less than Mohamed , then his friend has

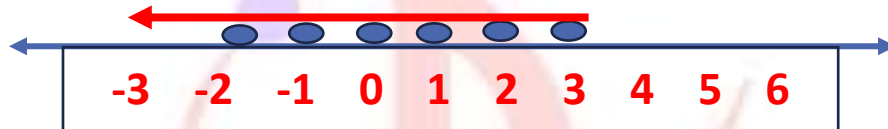
- a) 53 b) 47 c) 100 d) 19

14) A number is no more than 10 can be written as

- a) $x < 10$ b) $x > 10$ c) $x \leq 10$ d) $x \geq 10$

Q2 Complete the following :-

- 1) If $X + 2 = 9$, then $X = \dots\dots\dots$
- 2) If $Y - 3 = 10$, then $Y = \dots\dots\dots$
- 3) If $9Z = 63$ then $Z = \dots\dots\dots$
- 4) If $\frac{k}{8} = 7$, then $K = \dots\dots\dots$
- 5) Yara bought 3 pens for X L.E. each , she paid 15 L.E. , then $X = \dots\dots\dots$
- 6) If $x + x + x = 18$, then $x = \dots\dots\dots$
- 7) If $\frac{x}{3} = 4$, then twice $X = \dots\dots\dots$
- 8) If $k + 1 = 5$, then $k - 3 = \dots\dots\dots$
- 9) If $m - 3^2 = 1$, then $m = \dots\dots\dots$
- 10) The number of solutions of equation $x + 3 = 5$ is / are solution(s)
- 11) The inequality that represents the following graph is



- 12) is a solution of inequality $X < -3$

Q3 Answer the following :-

1) Younes needs 300 LE to buy pants , he does not have enough money .

Find three possible amount money Younes has .

2) Name 3 solutions of the inequality $x > -1$ then graph on a number line .

Q1 Choose the correct answer :-

- 1) Which of the following is an algebraic expression
 a) $44-3\times 4$ b) $3+7-0$ **c) $15a - 32$** d) $2(3-4)$
- 2) The number of like terms in the expression $3 = 2x + 5$ is
 a) 1 **b) 2** c) 3 d) 4
- 3) Which of the following are like terms ?
a) 25 , 52 b) l, m c) ab, aq d) ab, ac
- 4) $2 + 3$ (.....) complete to get numeric expression
 a) a b) x **c) $20 - 15$** d) $a + x$
- 5) Twice the difference of a number and 5 is
 a) $2Y + 5$ b) $2Y - 5$ **c) $2(Y - 5)$** d) $2(Y + 5)$
- 6) Yara saved n L.E. and her mother gave her 5 L.E. she will have
 a) $n - 5$ **b) $n + 5$** c) $5 - n$ d) $5n$
- 7) Nada is X years old now how old will she be after 6 years ?
 a) $x - 6$ b) $6x$ **c) $6 + x$** d) $6 - x$
- 8) $5^4 =$
 a) 4^5 b) 4×5 **c) $5 \times 5 \times 5 \times 5$** d) $4 \times 4 \times 4 \times 4$
- 9) The value of the expression $3n - 2$ for $n = 7$ is
 a) 14 **b) 19** c) 21 d) 23
- 10) The first operation you perform in the expression $5(3^2 - 2) + 7$ is
 a) add b) multiply c) subtract **d) exponent**
- 11) The value of the expression $2X^2 - (3 \times 4 + 2^3) =$ at $X = 5$
 a) 50 **b) 30** c) 40 d) 35

12) $8 - 3 \times 2 \div (4 - 2)^2 = \dots\dots\dots$

- a) 2.5 b) 1 c) 0.5 d) 6.5

13) Two cubed added to 5 squared equals = $\dots\dots\dots$

- a) $2 \times 3 + 5 \times 5$ b) $3^2 + 2^5$ c) $2^3 + 5^2$ d) $2^3 + 5^4$

14) The coefficient in the expression $6 - 3 + 5X$ is $\dots\dots\dots$

- a) 6, 3 b) $5X$ c) 5 d) X

15) Number of like terms in the expression $4a + 4b + 5$ is $\dots\dots\dots$

- a) 3 b) 2 c) 1 d) 0

16) Subtract 8 from the number k in algebraic form $\dots\dots\dots$

- a) $8 - k$ b) $k - 8$ c) $8 + k$ d) $8k$

17) Marwan has 50 L.E. he bought 3 pens each for k L.E. then the remainder is $\dots\dots\dots$

- a) 30 b) $3 + 50k$ c) $50 - 3k$ d) $50 + 3k$

18) Take away twice the number k from 15 is written as $\dots\dots\dots$

- a) $2k - 15$ b) $15 + 2k$ c) $15 - 2k$ d) $15 - k^2$

19) 5 times a number less 7 is $\dots\dots\dots$

- a) $5b + 7$ b) $5b - 7$ c) $7 - 5b$ d) $7 - b^2$

20) The value of the expression $5 + (X^2 - 3) = \dots\dots\dots$ at $X = 3$

- a) 6 b) 9 c) 12 d) 11

Q2 Complete the following :-

- 1) The constant in the expression $2X + 5$ is 5
- 2) The number of terms in expression $5 - 2m - 3m - 4$ is 4 terms
- 3) The coefficient in the algebraic expression $4X + 3$ is 4
- 4) $5 (4 + 6)$ is numeric expression
- 5) $2m - 3$ is algebraic expression
- 6) The verbal expression for $2m - 7$ is seven is subtracted from twice a number m
- 7) The algebraic expression for a number less 7 is $X - 7$
- 8) Seif works X hours daily , then the algebraic expression for the number of worked hours monthly is $30X$
- 9) Write the algebraic expression for subtract 7 from the double of number X
 $3X - 7$
- 10) Write the algebraic expression for 8 decreased by 3 times a number M
 $8 - 3M$
- 11) Write the algebraic expression for twice the sum of a number and 3
 $2(b + 3)$
- 12) The value of expression $4 (3X + 1) = 16$ at $X = 1$
- 13) Five squared = 5^2
- 14) If the price of a piece of tart is 18 L.E , then the algebraic expression represent the price of n pieces is $18n$
- 15) If the base is 7 , the exponent is 5 then the exponential form is 7^5
- 16) $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 = 3^7$
- 17) Area of the square whose side length 7 cm in the exponential form is 7^2
- 18) The volume of cube whose edge length 5 cm is 5^3
- 19) 5 cubed = 5^3

Q3 Answer the following :-

1) If Farida has 25 LE in her money box , she will save 20 LE daily .

- a) **What** algebraic expression represents the situation ?
- b) **How** much money in the money box after 3 days ?

Expression is $25 + 20X$

After 3 days = $25 + 20 \times 3 = 85$ LE

2) Examine these two expressions and determine if they are equal $4(x+1)$ and $4x + 1$.

$$4(x+1) = 4x+4$$

So $4(x+1)$ and $4x+1$ are not equal

Unit 4

Q1 Choose the correct answer :-

1) If $25 \div b = 5$, then $b =$

- a) 20 **b) 5** c) 40 d) 1

2) If $3X = 12$, then $\frac{1}{2} X =$

- a) 9 b) 6 **c) 4** d) 2

3) If $y \div 2 = 8$, then $\frac{1}{4} y =$

- a) 8 b) 6 **c) 4** d) 2

4) A number if added to 17 , the sum is 28 then the number is

- a) 11** b) 18 c) 45 d) 18

5) A product of a number x and 6 is 42 , then $x =$

- a) 6 **b) 7** c) 48 d) 36

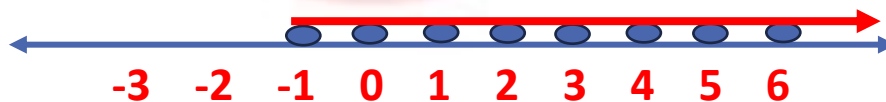
6) Which of the following is a solution of inequality $m \geq -1$?

- a) -2 b) -3 c) -4 **d) 0**

7) All of the following are solutions of inequality $m < -3$ except

- a) -2** b) -10 c) -5 d) -6

8) The inequality that represent the graph is



- a) $k < -1$ b) $k > -1$ c) $k \leq -1$ **d) $k \geq -1$**

9) Number of solutions of inequality $s > 10$ is

- a) 2 b) 1 c) 0 **d) infinite**

10) is a solution of $x < 4$

a) 3.96

b) 4

c) 4.23

d) 5

11) All of the following are solutions of inequality $m > -3$ except

a) $|-4|$

b) -3

c) 4

d) 5

12) If $3x = 0$, then $\frac{1}{2}x =$

a) 3

b) -3

c) $1\frac{1}{2}$

d) 0

13) Mohamed has 47 pounds, his friend has less than Mohamed, then his friend has

a) 53

b) 47

c) 100

d) 19

14) A number is no more than 10 can be written as

a) $x < 10$

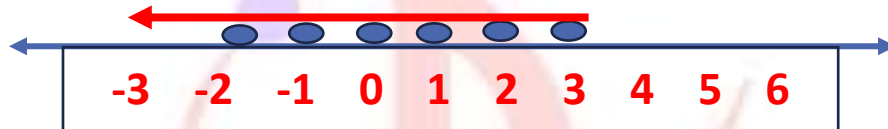
b) $x > 10$

c) $x \leq 10$

d) $x \geq 10$

Q2 Complete the following :-

- 1) If $X + 2 = 9$, then $X = 7$
- 2) If $Y - 3 = 10$, then $Y = 13$
- 3) If $9Z = 63$ then $Z = 7$
- 4) If $\frac{k}{8} = 7$, then $K = 56$
- 5) Yara bought 3 pens for X L.E. each , she paid 15 L.E. , then $X = 5$
- 6) If $x + x + x = 18$, then $x = 6$
- 7) If $\frac{x}{3} = 4$, then twice $X = 24$
- 8) If $k + 1 = 5$, then $k - 3 = 1$
- 9) If $m - 3^2 = 1$, then $m = 10$
- 10) The number of solutions of equation $x + 3 = 5$ is / are 1 solution(s)
- 11) The inequality that represents the following graph is $X \leq 3$



- 12) -10 is a solution of inequality $X < -3$

Q3 Answer the following :-

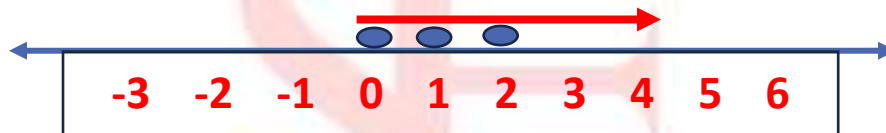
1) Younes needs 300 LE to buy pants , he does not have enough money .

Find three possible amount money Younes has .

200LE , 100LE , 150LE

2) Name 3 solutions of the inequality $x > -1$ then graph on a number line .

{0, 1, 2}



Model 1

1) Choose the correct answer :-

- a) "k equals the product of L and 8" as an equation is _____
A. $k = 8L$ B. $k = 8+L$ C. $L = 8k$ D. $L=8+k$
- b) The cube of 6 equals _____
A. 3×6 B. $6+3$ C. 6^3 D. 3^6
- c) If $3x = 27$, then $x =$ _____
A. $27+3$ B. $27-3$ C. 27×3 D. $27 \div 3$
- d) In the rule: $y = x + 4$, if $x = 1$, then y would be _____
A. 3 B. 5 C. 4 D. 2
- e) The first operation you perform in the expression: $5x(3^2 - 2) + 7$ is the _____
A. multiplication. B. exponent. C. subtraction. D. addition.
- f) All the following are solutions of the inequality $x < 0$ except _____
A. -1 B. $-|-3|$ C. $|-4|$ D. -5
- g) The value of the expression: $4n - 5$ if $n = 2$ is _____
A. 1 B. 3 C. 37 D. 12
- h) In the equation: $4a + 9 = m$, then independent variable is _____
A. 4 B. a C. 9 D. m
- i) The smallest solution of the inequality $x \geq 5$ is _____
A. -5 B. 4 C. 6 D. 5

2) Answer the following :-

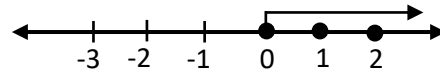
- a) Find the value of y if the ordered pair (4 , ———) satisfies the equation: $y = 2x+1$
- b) Find three solutions for the inequality : $x \leq -1$
- c) Examine these two expressions: $3(x + 1)$ and $2x+x+3$, then decide if these two expressions are always equal and if they should be considered equivalent expressions
- d) Write an equation. Use the variables x and y, where x is the independent. Using the rule
"Add 3", then substitute $x = 2$ to evaluate y
- e) Use order of operations and exponent to simplify: $2 \times 5 + (6^2 - 24 \div 2)$
- f) Maria has 150 LE to buy tools , she does not have enough money .
Find three possible amount money Maria has .
- g) If the price of a piece of tart is 32 L.E , what is the algebraic expression represent the price of X pieces ?

Model 2**1) Choose the correct answer:**

- a) If $x+3=10$, then $x + 2 =$ _____
A. 5 B. 15 C. 9 D. 13
- b) In the rule: $5x+1 = y$, then dependent variable is _____
A. 5 B. 1 C. x D. y
- c) The coefficient in the expression $6 - 3 + 5X$ is
A. 6 , 3 B. $5x$ C. 5 D. x
- d) The ordered pair (_____ , 2) satisfies the algebraic equation: $y = x+1$
A. 1 B. 2 C. y D. 0
- e) The algebraic equation of "add 3 to the product of 5 and x equals y " is _____
A. $3+x = y$ B. $5x+3 = y$ C. $3x+5 = y$ D. $35+x = y$
- f) If $x + 3 = 5$, then $4x =$ _____
A. 3 B. 4 C. 8 D. 32
- g) Subtract 8 from the number k in algebraic form
A. $k - 8$ B. $8 + k$ C. $8 - k$ D. $8k$
- h) Number of solutions of inequality $s > 10$ is
A. 2 B. 1 C. 0 D. infinite
- i) Number of like terms in the expression $4a + 4b + 5$ is
A. 2 B. 0 C. 1 D. 3

2) Answer the following :-

a) The inequality that represented by the opposite number line in the set of integers is _____



b) Find the exponent in $7 \times 7 \times 7 \times 7 = 7$ —

c) In the equation: $y = x + 3$, if the output is 10, then what is the input ?

d) What is the greatest solution of the inequality $X \leq -2$?

e) The verbal expression of " $x + 10 = y$ " is _____

f) Seif bought 6 pens for X L.E. each , she paid 24 L.E. , what is the value of X ?

g) Write the verbal expression for $2m - 7$ is

Answers

Model 1

1) Choose the correct answer :-

- a) "k equals the product of L and 8" as an equation is _____
A. $k = 8L$ B. $k = 8+L$ C. $L = 8k$ D. $L=8+k$
- b) The cube of 6 equals _____
A. 3×6 B. $6+3$ C. 6^3 D. 3^6
- c) If $3x = 27$, then $x =$ _____
A. $27+3$ B. $27-3$ C. 27×3 D. $27 \div 3$
- d) In the rule: $y = x + 4$, if $x = 1$, then y would be _____
A. 3 B. 5 C. 4 D. 2
- e) The first operation you perform in the expression: $5x(3^2 - 2) + 7$ is the _____
A. multiplication. B. exponent. C. subtraction. D. addition.
- f) All the following are solutions of the inequality $x < 0$ except _____
A. -1 B. $-|-3|$ C. $|-4|$ D. -5
- g) The value of the expression: $4n - 5$ if $n = 2$ is _____
A. 1 B. 3 C. 37 D. 12
- h) In the equation: $4a + 9 = m$, then independent variable is _____
A. 4 B. a C. 9 D. m
- i) The smallest solution of the inequality $x \geq 5$ is _____
A. -5 B. 4 C. 6 D. 5

2) Answer the following :-

a) Find the value of y if the ordered pair (4 , 9) satisfies the equation: $y = 2x+1$

b) Find three solutions for the inequality : $x \leq -1$ -1,0,1

c) Examine these two expressions: $3(x + 1)$ and $2x+x+3$, then decide if these two expressions are always equal and if they should be considered equivalent expressions

$$3(x + 1) = 3x + 3$$

$$2x+x+3 = 3x + 3$$

They are equivalent

d) Write an equation. Use the variables x and y, where x is the independent. Using the rule

"Add 3", then substitute $x = 2$ to evaluate y

$$Y=x+3$$

$$Y=2+3=5$$

e) Use order of operations and exponent to simplify: $2 \times 5 + (6^2 - 24 \div 2)$

$$34$$

f) Maria has 150 LE to buy tools , she does not have enough money .

Find three possible amount money Maria has .

100 , 120 , 140

g) If the price of a piece of tart is 32 L.E , what is the algebraic expression represent the price of X pieces ?

$$y = 32x$$



Model 2

1) Choose the correct answer:a) If $x+3=10$, then $x + 2 =$ _____

- A. 5 B. 15 C. 9 D. 13

b) In the rule: $5x+1 = y$, then dependent variable is _____

- A. 5 B. 1 C. x D. y

c) The coefficient in the expression $6 - 3 + 5X$ is

- A. 6 , 3 B.
- $5x$
- C. 5 D. x

d) The ordered pair (_____ , 2) satisfies the algebraic equation: $y = x+1$

- A. 1 B. 2 C. y D. 0

e) The algebraic equation of "add 3 to the product of 5 and x equals y " is _____

- A.
- $3+x = y$
- B.
- $5x+3 = y$
- C.
- $3x+5 = y$
- D.
- $35+x = y$

f) If $x + 3 = 5$, then $4x =$ _____

- A. 3 B. 4 C. 8 D. 32

g) Subtract 8 from the number k in algebraic form

- A.
- $k - 8$
- B.
- $8 + k$
- C.
- $8 - k$
- D.
- $8k$

h) Number of solutions of inequality $s > 10$ is

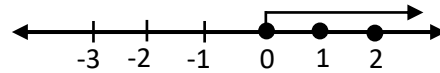
- A. 2 B. 1 C. 0 D. infinite

i) Number of like terms in the expression $4a + 4b + 5$ is

- A. 2 B. 0 C. 1 D. 3

2) Answer the following :-

a) The inequality that represented by the opposite number line in the set of integers is $x \leq 0$ or $x < -1$



b) Find the exponent in $7 \times 7 \times 7 \times 7 = 7^4$

c) In the equation: $y=x+3$, if the output is 10, then what is the input ? 7

d) What is the greatest solution of the inequality $X \leq -2$? -2

e) The verbal expression of " $x+10=y$ " is the sum of 10 and x is y

f) Seif bought 6 pens for X L.E. each , she paid 24 L.E. , what is the value of X ? 4

g) Write the verbal expression for $2m - 7$ is seven is subtracted from twice a number m.

حمل الآن

مجاناً وحصرياً

المراجعة رقم (5)

اختبار شهر نوفمبر



Q1: Choose the correct answer

- 1 Volume of a cube of edge length 5 cm is
- ☐ a 6×5 ☐ b 25 ☐ c 5^3 ☐ d 5^2
- 2 The first step will you perform in $3 \times 5 + 3 (2^3 - 5) - 4 \div 2$ is
- ☐ a parantheses ☐ b plus ☐ c multiply ☐ d exponent
- 3 In 4^6 , 6 is called
- ☐ a base ☐ b factor ☐ c multiple ☐ d exponent
- 4 Three squared =
- ☐ a 2^3 ☐ b 3^3 ☐ c 3^2 ☐ d 2^2
- 5 Laila saved n L.E. and her mother gave her 5 L.E., she will have L.E
- ☐ a $n - 5$ ☐ b $n + 5$ ☐ c $5n$ ☐ d $5 - n$
- 6 Two cubed subtracted from 4 squared =
- ☐ a $4^2 - 2^3$ ☐ b $4 \times 2 - 2 \times 3$ ☐ c $2^3 - 4^2$ ☐ d $4^3 - 2^2$
- 7 The value of the expression: $2x^2 - (3 \times 4 + 2^3) = \dots\dots\dots$ at $x = 5$
- ☐ a 30 ☐ b 50 ☐ c 35 ☐ d 40
- 8 $9 \times 9 \times 9 \times 9 \times 9 = \dots\dots\dots$
- ☐ a 5×9 ☐ b 9^5 ☐ c 5^9 ☐ d 81×81
- 9 If the price of one shirt is 420 Egyptian pounds, then the price of m number of shirts is.....
- ☐ a $420m$ ☐ b $420 \div m$
☐ c $420 + m$ ☐ d $420 - m$



10 $(10 \times 3 - 8) - 5 \times (6 - 2) = \dots\dots\dots$

a 8

b 0

c 2

d 68

11 The first operation you perform in the expression $2(5 - 3) + 10$ is

a exponent

b subtract

c multiply

d add

12 The value of the expression $2 + 16 - 3b$ when $b = 4$ is

a 4

b 2

c 6

d 10

13 $(3^3 - 3^2) \div 3^2 = \dots\dots\dots$

a 27

b 9

c 18

d 2

14 The value of the expression $3n - 2$ for $n = 7$ is

a 14

b 19

c 21

d 23

15 The value of the expression $(12 - x^3) \div 2$ when $x = 2$ is

a 10

b 2

c 8

d 6

16 7 Cubed =

a 7×7

b 3^7

c 7^3

d 49

17 Hadeer bought x candies for 7 L.E. each she paid 35 L.E, then $x = \dots\dots\dots$

a 42

b 5

c 7

d 28

18 The additive inverse of the number 5^2 is

a -5

b 10

c -25

d 25

19 The exponential form 5^3 is equivalent to

a $5 + 3$

b 5×3

c $5 + 5 + 5$

d $5 \times 5 \times 5$



20 Which of the following algebraic expressions is equivalent to $2(y + 4)$?

- (a) $2y + 4$ (b) $y + 8$ (c) $2y + 8$ (d) $y + 4 + 2$

21 The cost of renting a bicycle is R pounds per hour, and the cost of renting helmet is H pounds. If Sara rented a bicycle for 4 hours and a helmet, then the algebraic expression for this cost is

- (a) $4R + H$ (b) $R + 4H$ (c) $4(R + H) + 8$ (d) $4R \times H$

22 Which of the following algebraic expressions is equivalent to $5(z - 2)$?

- (a) $5z - 2$ (b) $z - 10$ (c) $5z - 10$ (d) $5z + 10$

23 Laila bought a number of C sweets for 3 pounds per piece, and a number of M biscuits for 3 pounds per piece. The algebraic expression for this cost is

- (a) $3C + 10M$ (b) $10C + 3M$ (c) $3(C + M)$ (d) $13(C + M)$

Q2: Answer The Following

1 Malek has 200 L.E, his weekly pocket money he spends 20 L.E. daily.

- (a) The algebraic expression represent that is
 (b) The remained money after 5 days is
 (c) The remained money by the end of two weeks is

2 $5 \times 5 \times 5 = 5$

3 The value of the expression $3(2h - 3) + 2$ at $h = 2.5$ is

4 The value of the expression $2 \times (k^2 - 5)$ (when $k = 4$) is

5 If the side of a square is "S", then its Area equals

6 The algebraic expressions " $2x + 3$ " and " $2(x + 1)$ " are expressions of (equal, not equal)



7 In a car park, If there is an entrie fee is 10 L.E and every hour passed there for 20 L.E

- a The algebraic expression express that is
- b The cost of passing 6 hours is

Use the order of mathematical operations to simplify: $40 \div 5 (2^3 - 5) - 10$

8 If the base is 3 and the exponent is 4, then the exponential form of the number is

9 In 3^8 : 3 is called and 8 is called

10 $13 - 7 + 2^3 \times 3^2 = \dots\dots\dots$

11 What is the exponential form of a number whose base 2 and exponent 4, and what is its numerical value?

12 Express the following numerical expression in simplest form: $15 \div 3 - 2 (4^2 - 15)$

13 Find the value of the algebraic expression: $8 - 5 (m^3 - 7)$ when $m = 2$

14 Find the value of the algebraic expression: $(z^2 - 4) \div 7$ when $z = 5$

15 $\frac{m}{5} = 5$, Then the value of $m = \dots\dots\dots$

16 If the side of square is (y) cm, then the perimeter is



17 Find the value of the algebraic expression in each of the following:

a $10y^4 \times (8 \div y^{10}) + 5$ [for $y = 1$] b $6^2 \div 3 \times (a - 2)$ [For $a = 4$]

18 Six squared =

19 $2m + (4 + m^2) \div 5$, [for $m = 4$] equals

20 Hosam wants to buy some shoes, so the price of one shoes was 150 pounds and he has a coupon worth 50 pounds from the value of all purchases.

Write an algebraic expression to represent this situation,

then find how much Hossam will pay when he buys 3 shoes.

21 Are the two algebraic expressions: $2(x - 3) + 4x$ and $6x - 6$ equivalent? Why?



Q1: Choose the correct answer

1 Number of solutions of inequality $x > 10$ is

- (a) 0 (b) 1 (c) 2 (d) infinite

2 If $b = 6$, then $b - \dots = 4$.

- (a) 10 (b) 4 (c) 2 (d) 6

3 Which of the following is not a solution of $k > 2.5$?

- (a) 3 (b) 2.7 (c) 2.49 (d) 4.9

4 If $m + m + m + m = 32$, then $m = \dots$

- (a) 8 (b) 9 (c) 7 (d) 6

5 Ahmed bought 4 balls for y L.E each, He paid 280 L.E, then $y = \dots$ L.E

- (a) 140 (b) 7 (c) 40 (d) 70

6 A number if added to 4 the sum is 12 then the number is

- (a) 8 (b) 16 (c) 3 (d) 4

7 The inequality that represents non-positive integers

- (a) $x > 0$ (b) $x < 0$ (c) $x \leq 0$ (d) $x \geq 0$

8 A number is no more than 10 can be written as

- (a) $n \leq 10$ (b) $n > 10$ (c) $n < 10$ (d) $n \geq 10$

9 Mohamed has 47 L.E, his friend Mina has less money than Mohamed, then Mina may has L.E

- (a) 53 (b) 42
(c) 62 (d) 87



10 If $y = 36$, then $\frac{y}{\dots} = 9$

(a) 3

(b) 5

(c) 2

(d) 4

11 $\frac{k}{3} = 5$, Then the value of $k = \dots\dots\dots$

(a) 3

(b) 5

(c) 15

(d) 35

12 Ayman bought 4 pens for x L.E, each and he paid 24 L.E. , then $x = \dots\dots\dots$

(a) 96

(b) 8

(c) 6

(d) 20

13 If $4n = 12$, then $6n = \dots\dots\dots$

(a) 4

(b) 12

(c) 18

(d) 3

14 If $3 \times m = 27$, Then the value of Third $m = \dots\dots\dots$

(a) 3

(b) 9

(c) 27

(d) otherwise

15 The inequality that represents all values greater than -5 is $\dots\dots\dots$

(a) $x > -5$

(b) $x < -5$

(c) $x \leq -5$

(d) $x \geq -5$

16 If $2m = 2$, Then $7m = \dots\dots\dots$

(a) 1

(b) 2

(c) 7

(d) 9

17 Ahmed Nassr bought m kg of banana for 30 L.E. each He paid 120 L.E, then $m = \dots\dots\dots$

(a) 90

(b) 150

(c) 40

(d) 4

18 If the equation : $x - 3 = 1$, then $\frac{1}{2}x = \dots\dots\dots$

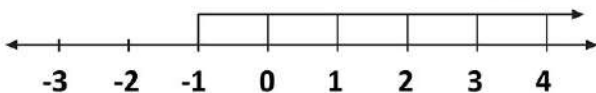
(a) 1

(b) 2

(c) 3

(d) 4

19 $\dots\dots\dots$ is a solution of the following graphed inequality.



(a) -10

(b) 10

(c) -2

(d) -3



20 Which of the following represents an equation

- (a) $x > 5$ (b) $y < 10$ (c) $m + 5 = 12$ (d) $z \geq 3$

21 The smallest Integer that satisfies the inequality $x \geq -6$, is

- (a) -7 (b) -6 (c) -5 (d) 0

22 Which of the following represents an inequality

- (a) $x + 7 = 15$ (b) $z = 213$ (c) $y < 12$ (d) $y - 3 = 10$

23 The value of a that satisfies the equation $a + 5 = 15$ is

- (a) 3 (b) 5 (c) 10 (d) 15

24 The inequality is a mathematical sentence that contains one of the signs

- (a) equals (b) expresion (c) variable (d) less than

25 The solution of the equation $x + 85 = 120$ in Z is

- (a) 30 (b) 35 (c) 40 (d) 45

Q2: Answer The Following

1 Write the eqaution that represents the following model, then find the value of x:

- (a) Equation is
(b) Value of x =

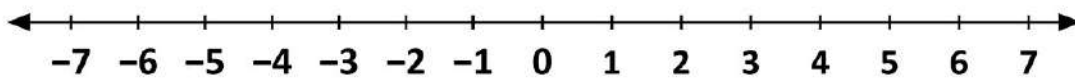


2 Write inequality that represents counting numbers

3 A product of a number K and 6 is 42, then K =



- 4 Represent the solution of the inequality in Z on the number-line: $x < -3$



- 5 Solve the following equations:

a $2m = 18$

b $3m - 3 = 12$

- 6 Ahmed Nassr went to the supermarket, He bought 7 kg sugar for k L.E, If He paid 210 L.E Find The value of k

- 7 Name three solutions of the inequality $-7 < y$: , ,

- 8 A number if added to 7 the sum is 13, then the number is

- 9 The inequality that represents non-positive integers

- 10 The inequality that represents the statement "All values to the right of -1 on a number line" is

- 11 If the maximum height allowed to pass under a bridge is 2.8 meters, write the inequality that express this situation

- 12 Express the following inequality "y is greater than or equal to 6".

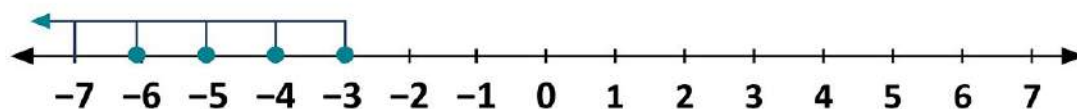
- 13 If $3y - 5 = 7$, then the value of y =

- 14 The inequality that represents natural numbers is



15 If $k = 56$, then $k \div \dots\dots\dots = 7$

16 Write the inequality represented by following number line:



17 The inequality that represents all values greater than -7 is

18 Write inequality that represents non-negative numbers

19 Write inequality that represents -2 and all values to the right of -2 on the number line

20 A train car can hold a maximum of 48 persons at most.
State 3 possible number of persons who can ride the train car?

21 Find the value of x of the following equations:

a $\frac{1}{4}x - 8 = 20$

b $5x + 6 = 26$

22 List 3 solutions of each inequality. Then graph the inequality on a number line in the set of integers:

a $n > 1$

b $y \leq -3$



Q1: Choose the correct answer

- 1 Volume of a cube of edge length 5 cm is
 (a) 6×5 (b) 25 (c) 5^3 (d) 5^2
- 2 The first step will you perform in $3 \times 5 + 3 (2^3 - 5) - 4 \div 2$ is
 (a) parantheses (b) plus (c) multiply (d) exponent
- 3 In 4^6 , 6 is called
 (a) base (b) factor (c) multiple (d) exponent
- 4 Three squared =
 (a) 2^3 (b) 3^3 (c) 3^2 (d) 2^2
- 5 Laila saved n L.E. and her mother gave her 5 L.E., she will have L.E
 (a) $n - 5$ (b) $n + 5$ (c) $5n$ (d) $5 - n$
- 6 Two cubed subtracted from 4 squared =
 (a) $4^2 - 2^3$ (b) $4 \times 2 - 2 \times 3$ (c) $2^3 - 4^2$ (d) $4^3 - 2^2$
- 7 The value of the expression: $2x^2 - (3 \times 4 + 2^3) = \dots\dots\dots$ at $x = 5$
 (a) 30 (b) 50 (c) 35 (d) 40
- 8 $9 \times 9 \times 9 \times 9 \times 9 = \dots\dots\dots$
 (a) 5×9 (b) 9^5 (c) 5^9 (d) 81×81
- 9 If the price of one shirt is 420 Egyptian pounds, then the price of m number of shirts is.....
 (a) $420m$ (b) $420 \div m$
 (c) $420 + m$ (d) $420 - m$



10) $(10 \times 3 - 8) - 5 \times (6 - 2) = \dots\dots\dots$

a) 8

b) 0

c) 2

d) 68

11) The first operation you perform in the expression $2(5 - 3) + 10$ is

a) exponent

b) subtract

c) multiply

d) add

12) The value of the expression $2 + 16 - 3b$ when $b = 4$ is

a) 4

b) 2

c) 6

d) 10

13) $(3^3 - 3^2) \div 3^2 = \dots\dots\dots$

a) 27

b) 9

c) 18

d) 2

14) The value of the expression $3n - 2$ for $n = 7$ is

a) 14

b) 19

c) 21

d) 23

15) The value of the expression $(12 - x^3) \div 2$ when $x = 2$ is

a) 10

b) 2

c) 8

d) 6

16) 7 Cubed =

a) 7×7

b) 3^7

c) 7^3

d) 49

17) Hadeer bought x candies for 7 L.E. each she paid 35 L.E, then $x = \dots\dots\dots$

a) 42

b) 5

c) 7

d) 28

18) The additive inverse of the number 5^2 is

a) -5

b) 10

c) -25

d) 25

19) The exponential form 5^3 is equivalent to

a) $5 + 3$

b) 5×3

c) $5 + 5 + 5$

d) $5 \times 5 \times 5$



20 Which of the following algebraic expressions is equivalent to $2(y + 4)$?

☐ a $2y + 4$

☐ b $y + 8$

☒ c $2y + 8$

☐ d $y + 4 + 2$

21 The cost of renting a bicycle is R pounds per hour, and the cost of renting helmet is H pounds. If Sara rented a bicycle for 4 hours and a helmet, then the algebraic expression for this cost is

☒ a $4R + H$

☐ b $R + 4H$

☐ c $4(R + H) + 8$

☐ d $4R \times H$

22 Which of the following algebraic expressions is equivalent to $5(z - 2)$?

☐ a $5z - 2$

☐ b $z - 10$

☒ c $5z - 10$

☐ d $5z + 10$

23 Laila bought a number of C sweets for 3 pounds per piece, and a number of M biscuits for 3 pounds per piece. The algebraic expression for this cost is

☐ a $3C + 10M$

☐ b $10C + 3M$

☒ c $3(C + M)$

☐ d $13(C + M)$

Q2: Answer The Following

1 Malek has 200 L.E, his weekly pocket money he spends 20 L.E. daily.

☐ a The algebraic expression represent that is $200 - 20d$

☐ b The remained money after 5 days is 100

☐ c The remained money by the end of two weeks is 120

2 $5 \times 5 \times 5 = 5$ 3

3 The value of the expression $3(2h - 3) + 2$ at $h = 2.5$ is 8

4 The value of the expression $2 \times (k^2 - 5)$ (when $k = 4$) is 22

5 If the side of a square is "S", then its Area equals S^2

6 The algebraic expressions " $2x + 3$ " and " $2(x + 1)$ " are expressions of Not equal (equal, not equal)



7 In a car park, If there is an entrie fee is 10 L.E and every hour passed there for 20 L.E

a The algebraic expression express that is $20H + 10$..

b The cost of passing 6 hours is 130 ..

Use the order of mathematical operations to simplify: $40 \div 5 (2^3 - 5) - 10$

14

8 If the base is 3 and the exponent is 4, then the exponential form of the number is 3^4 ..

9 In 3^8 : 3 is called **base** and 8 is called **power**

10 $13 - 7 + 2^3 \times 3^2 =$ 78

11 What is the exponential form of a number whose base 2 and exponent 4, and what is its numerical value?

2^4 , 16

12 Express the following numerical expression in simplest form: $15 \div 3 - 2 (4^2 - 15)$

3

13 Find the value of the algebraic expression: $8 - 5 (m^3 - 7)$ when $m = 2$

3

14 Find the value of the algebraic expression: $(z^2 - 4) \div 7$ when $z = 5$

3

15 $\frac{m}{5} = 5$, Then the value of $m =$ 25 ..

16 If the side of square is (y) cm, then the perimeter is $4y$



17 Find the value of the algebraic expression in each of the following:

a $10y^4 \times (8 \div y^{10}) + 5$ [for $y = 1$] b $6^2 \div 3 \times (a - 2)$ [For $a = 4$]

85

24

18 Six squared = 6^2

19 $2m + (4 + m^2) \div 5$, [for $m = 4$] equals 12

20 Hosam wants to buy some shoes, so the price of one shoes was 150 pounds and he has a coupon worth 50 pounds from the value of all purchases.

Write an algebraic expression to represent this situation,

then find how much Hossam will pay when he buys 3 shoes.

Expression $150n - 50$; for 3 shoes $\rightarrow 400$

21 Are the two algebraic expressions: $2(x - 3) + 4x$ and $6x - 6$ equivalent? Why?

Yes, equivalent; $2(x - 3) + 4x = 6x - 6$



Q1: Choose the correct answer

1 Number of solutions of inequality $x > 10$ is

a 0

b 1

c 2

d infinite

2 If $b = 6$, then $b - \dots = 4$.

a 10

b 4

c 2

d 6

3 Which of the following is not a solution of $k > 2.5$?

a 3

b 2.7

c 2.49

d 4.9

4 If $m + m + m + m = 32$, then $m = \dots$

a 8

b 9

c 7

d 6

5 Ahmed bought 4 balls for y L.E each, He paid 280 L.E, then $y = \dots$ L.E

a 140

b 7

c 40

d 70

6 A number if added to 4 the sum is 12 then the number is

a 8

b 16

c 3

d 4

7 The inequality that represents non-positive integers

a $x > 0$

b $x < 0$

c $x \leq 0$

d $x \geq 0$

8 A number is no more than 10 can be written as

a $n \leq 10$

b $n > 10$

c $n < 10$

d $n \geq 10$

9 Mohamed has 47 L.E, his friend Mina has less money than Mohamed, then Mina may has L.E

a 53

b 42

c 62

d 87



10 If $y = 36$, then $\frac{y}{\dots} = 9$

(a) 3

(b) 5

(c) 2

(d) 4

11 $\frac{k}{3} = 5$, Then the value of $k = \dots\dots\dots$

(a) 3

(b) 5

(c) 15

(d) 35

12 Ayman bought 4 pens for x L.E, each and he paid 24 L.E. , then $x = \dots\dots\dots$

(a) 96

(b) 8

(c) 6

(d) 20

13 If $4n = 12$, then $6n = \dots\dots\dots$

(a) 4

(b) 12

(c) 18

(d) 3

14 If $3 \times m = 27$, Then the value of Third $m = \dots\dots\dots$

(a) 3

(b) 9

(c) 27

(d) otherwise

15 The inequality that represents all values greater than -5 is $\dots\dots\dots$

(a) $x > -5$

(b) $x < -5$

(c) $x \leq -5$

(d) $x \geq -5$

16 If $2m = 2$, Then $7m = \dots\dots\dots$

(a) 1

(b) 2

(c) 7

(d) 9

17 Ahmed Nassr bought m kg of banana for 30 L.E. each He paid 120 L.E, then $m = \dots\dots\dots$

(a) 90

(b) 150

(c) 40

(d) 4

18 If the equation : $x - 3 = 1$, then $\frac{1}{2}x = \dots\dots\dots$

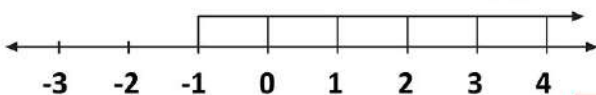
(a) 1

(b) 2

(c) 3

(d) 4

19 $\dots\dots\dots$ is a solution of the following graphed inequality.



(a) -10

(b) 10

(c) -2

(d) -3



20 Which of the following represents an equation

(a) $x > 5$

(b) $y < 10$

(c) $m + 5 = 12$

(d) $z \geq 3$

21 The smallest Integer that satisfies the inequality $x \geq -6$, is

(a) -7

(b) -6

(c) -5

(d) 0

22 Which of the following represents an inequality

(a) $x + 7 = 15$

(b) $z = 213$

(c) $y < 12$

(d) $y - 3 = 10$

23 The value of a that satisfies the equation $a + 5 = 15$ is

(a) 3

(b) 5

(c) 10

(d) 15

24 The inequality is a mathematical sentence that contains one of the signs

(a) equals

(b) expresion

(c) variable

(d) less than

25 The solution of the equation $x + 85 = 120$ in Z is

(a) 30

(b) 35

(c) 40

(d) 45

Q2: Answer The Following

1 Write the equation that represents the following model, then find the value of x:

(a) Equation is $2x + 2 = 10$

(b) Value of x = 4

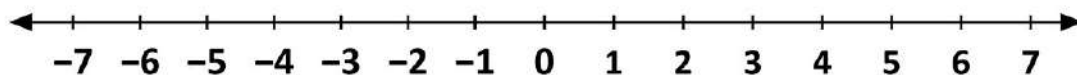


2 Write inequality that represents counting numbers $x > 0$

3 A product of a number K and 6 is 42, then K = 7



- 4 Represent the solution of the inequality in Z on the number-line: $x < -3$



- 5 Solve the following equations:

a $2m = 18$

b $3m - 3 = 12$

9

5

- 6 Ahmed Nassr went to the supermarket, He bought 7 kg sugar for k L.E, If He paid 210 L.E Find The value of k

30

- 7 Name three solutions of the inequality $-7 < y$:5.....,7.....,9.....

- 8 A number if added to 7 the sum is 13, then the number is6.....

- 9 The inequality that represents non-positive integers $x \leq 1$

- 10 The inequality that represents the statement "All values to the right of -1 on a number line" is $x > -1$

- 11 If the maximum height allowed to pass under a bridge is 2.8 meters, write the inequality that express this situation

$h \leq 2.8$

- 12 Express the following inequality "y is greater than or equal to 6". $y \geq 6$

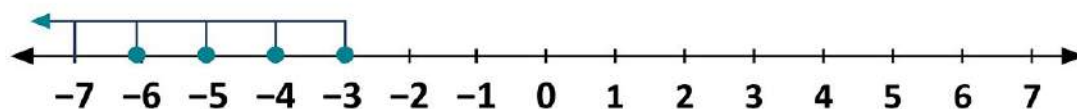
- 13 If $3y - 5 = 7$, then the value of y =4.....

- 14 The inequality that represents natural numbers is $x > -1$



15 If $k = 56$, then $k \div \dots\dots\dots = 7$

16 Write the inequality represented by following number line:



$x < -2$

17 The inequality that represents all values greater than -7 is $\dots\dots\dots$

18 Write inequality that represents non-negative numbers $\dots\dots\dots$

19 Write inequality that represents -2 and all values to the right of -2 on the number line $\dots\dots\dots$

20 A train car can hold a maximum of 48 persons at most.
State 3 possible number of persons who can ride the train car?

$35, 40, 45$

21 Find the value of x of the following equations:

a $\frac{1}{4}x - 8 = 20$

b $5x + 6 = 26$

112

4

22 List 3 solutions of each inequality. Then graph the inequality on a number line in the set of integers:

a $n > 1$ $\dots\dots\dots$

b $y \leq -3$ $\dots\dots\dots$



حمل الآن

مجاناً وحصرياً

المراجعة رقم (6)

اختبار شهر نوفمبر



November Exercises**Q1: Choose the correct answer**

1) $2^3 = \dots\dots\dots$

☐ a 9☐ b 8☐ c 6☐ d 5

2) The first step to simplify $30 - 7 + 3^2$ is $\dots\dots\dots$

☐ a subtraction☐ b division☐ c exponent☐ d addition

3) $4 \times 5 + 3^2 = \dots\dots\dots$

☐ a 68☐ b 29☐ c 56☐ d 11

4) $92 - 24 \div 4 + 11 = \dots\dots\dots$

☐ a 26☐ b 5☐ c 28☐ d 97

5) The value of the expression: $7 \div (10x - 4)$ when $x = 0.5$ $\dots\dots\dots$

☐ a 2☐ b 1☐ c 7☐ d 5

6) $1^5 = \dots\dots\dots$

☐ a 5☐ b 1☐ c 0☐ d 4

7) To find the value of the expression: $5 + 3 \times 4^2$ which operation is performed first?

☐ a $5 + 3$ ☐ b 3×4 ☐ c 4^2 ☐ d $4 - 10$

8) All of the following algebraic expressions are equivalent to the algebraic expression $2(6x + 5)$ except $\dots\dots\dots$

☐ a $12x + 10 + 5$ ☐ b $5x + 7x + 10$ ☐ c $10x + 2x + 10$ ☐ d $12x + 10$

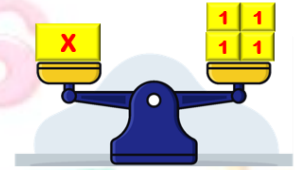
9) The value of A in the equation $A - 7 = 15$ is

- (a) 8 (b) $\frac{15}{7}$ (c) 105 (d) 22

10) Which of the following equations has a solution of 8

- (a) $y - 4 = 12$ (b) $d + 2 = 10$ (c) $x + 1 = 7$ (d) $a - 1 = 9$

11) Which of the following equations represents the corresponding two-pan balance



- (a) $4x$ (b) $x + 4$ (c) $4x = 1$ (d) $x = 4$

12) If the depth of the swimming pool does not exceed 5 meters, which of the following could be the depth of the pool?

- (a) 6.8 (b) 8 (c) 4 (d) 10

13) Ahmed reads at least 30 pages daily. Which of the following can express the number of pages Ahmed reads per day?

- (a) 15 (b) 40 (c) 29 (d) 25

14) The expression that expresses x as greater than or equal to 7 is

- (a) $x > 7$ (b) $x < 7$ (c) $x \leq 7$ (d) $x \geq 7$

15) The number 5 is one of the solutions to the inequality

- (a) $x > 5$ (b) $x < 5$ (c) $x < 7$ (d) $x > 7$

16) Which of the following does not belong to the solution set of the inequality: $X < 8$ in Z

- (a) -9 (b) -7 (c) 8 (d) 5

17) An equation is a mathematical sentence that includes a relation between two mathematical expressions

- (a) $>$ (b) $=$ (c) $<$ (d) $\leq$

18) The dependent variable in the equation: $y = 3x + 2$ is

- (a) 2 (b) 3 (c) x (d) y

19) The independent variable in the equation: $y = 4x - 5$ is

- (a) -5 (b) 4 (c) x (d) y

20) In the equation: $y = 3 + x$, the symbol x represents

- (a) independent (b) dependent (c) coefficient (d) constant

21) In the equation: $y = 8x + 1$, if $x = 1.5$, then y equals

- (a) 11 (b) 10.5 (c) 12 (d) 13

22) If x and y are variables and x is the independent variable, the equation that expresses the rule (multiply by 5 then add 3) is

- (a) $x=5y+3$ (b) $y=5+3x$ (c) $y=5x+3$ (d) $y=3x+3$

23) Mona recorded the total cost of electricity consumed in a month d and the number of kilowatt hours they consumed in the same month r. the cost d represents

- (a) dependent (b) independent (c) coefficient (d) constant

24) The number of notebooks you can buy depends on

- (a) amount of money you have (b) the location of library
(c) name of your school (d) your address

25) The number of problems you solve m and the time required to solve n, then the dependent variable is

- (a) number of problems m (b) number of problems n
(c) time solve m (d) time solve n

26) Maryam spent 40 pounds to buy 5 pens, the equation that expresses the relation between the number of pounds y and the number of pens x is

- (a) $y = x + 8$ (b) $y = x + 5$ (c) $y = 8x$ (d) $y = x - 8$

27) The smallest integer that satisfies the inequality: $x > -6$ is

- (a) -7 (b) -5 (c) -8 (d) -4

Q2: Answer the following**Find the result of the following**

- 1) $16 \div 4 + 5^2$
- 2) $8 \times 2^2 - 2 \times 5$
- 3) $3 [(2^2 + 4) + (1 + 3^2)] \times 2$
- 4) $3 \times [(5 - 2) + 3]^2$
- 5) $5 + 3^2 \times 2 + 50 \div 5$
- 6) $3 + 6 \times (5 + 4) \div 3$
- 7) $(2 + 4) \times 7 - 2^3 \div 8$
- 8) $(6^2 + 4) \div (9 - 5)$
- 9) $(8^2 \div 4 - 5) \times 3 + 2$
- 10) $3 \times 4^2 - 7 \times (4 + 1)$
- 11) find the value of: $4 + 9 - (2x + 8 - 5)$ if $x = 2$
- 12) find the value of: $7(y^2 - 4) - 10$ if $y = 4$
- 13) find the value of: $3 \times d^3 + 3(6 - 3)^2$ if $d = 2$
- 14) find the value of: $3(k^2 - 6)$ if $k = 4$
- 15) $7 + 6(m^2 - 3)$ if $m = 4$
- 16) $(7 + 3) \div 2 \times 3 - 2^3$
- 17) $36 \div 4 + 3^2 \times 2$
- 18) $2 - [(7 - 3) - 2^2]$
- 19) Are the two algebraic expressions $(2x + 6)$ and $2(x + 3)$ equivalent?
.....
.....
.....

20) Are the two algebraic expressions $2x + 5$ and $x + 5 + x$ equivalent?

.....

.....

.....

21) Are the two algebraic expressions $3x + 2$ and $2(x + 2)$ equivalent?

.....

.....

.....

22) Are the two algebraic expressions $4x + 4$ and $2x + 2(x + 2)$ equivalent?

.....

.....

.....

23) Are the two algebraic expressions $x + 3x + 4$ and $2(2x + 1) + 2$ equivalent?

.....

.....

.....

24) Are the two algebraic expressions $6(2x + 3)$ and $12x + 18$ equivalent?

.....

.....

.....

Solve the following equations:

25) $12 + y = 45$

26) $v - 21 = 85$

27) $5x + 6 = 26$

28) $7x - 8 = 20$

29) $\frac{1}{4}x - 8 = 4$

30) $\frac{1}{2}n = 3$

31) $f - 12 = 15$

32) $5 + p = 19$

33) Write inequality that express x is greater than or equal to -3

34) A train car can hold a maximum of 48 persons at most. State 3 possible number of persons who can ride the train car?

35) Write 3 possible solutions to the inequality: $x < 9$ in Z and represent it on the number line.

36) Write 3 possible solutions to the inequality: $x > 15$ in Z and represent it on the number line:

37) Write 3 possible solutions to the inequality: $x \leq 24$ in Z and represent it on the number line:

38) Mention 3 possible solutions to the inequality $x > 15$ in Z and represent it on the number line:

39) Mention 3 possible solutions to the inequality $x \leq 6$ in Z and represent it on the number line:

40) Write what the inequality $x > 5$ in Z and represent it on the number line

.....

41) Write what the inequality $x \geq 8$ in $\mathbb{Z}$ and represent it on the number line.

.....

42) If the number of problems that Adam solved yesterday was more than 20 problems, mention 3 possible solutions represent the number of problems that Adam solved?

43) If the rule is multiply by 2 and add 7, write the equation that expresses this using the two variables x and y , where x is the independent variable, and if $x = 3$, find the value of y ?

.....

44) If the rule is multiply by 3 and add 5, write the equation that expresses this using the two variables x and y , where x is the independent variable, and if $x = 2$, find the value of y ?

.....

45) If the rule is multiply by 6 and add 4, write the equation that expresses this using the two variables x and y , where x is the independent variable, and if $x = 4$, find the value of y ?

.....

46) If the rule is add 2 then multiply by 3, write the equation that expresses this using the two variables x and y , where x is the independent variable. If $x = 3$, find the value of y ?

.....

47) If the rule is add 5 then multiply by 2, write the equation that expresses this using the two variables y and x , where x is the independent variable. If $x = 4$, find the value of y ?

.....

48) If the rule is add 0.7 then multiply by 3, write the equation that expresses this using the two variables x and y where x is the independent variable, and if $x = 2$, find the value of y ?

.....

49) State the dependent and independent variables if the food bill is m and the number of meals is n ?

.....

50) Identify the dependent and independent variables if the price of the pants that Amjad bought is t and the number of pants is k ?

51) Determine the dependent and independent variables if the number of meals the restaurant sells is n and the profit it earns is a ?

52) From the following table, using the two variables x and y , where x is the independent variable, write the equation that expresses the table:

X	5	6	7	8	9
Y	7	8	9	10	11

53) Using the following table using the two variables x and y , where x is an independent variable, write the equation that expresses the table:

X	0.5	1	1.5	2	2.5
Y	1.5	3	4.5	6	7.5

54) Using the following table using the two variables x and y , where x is an independent variable, write the equation that expresses the table:

X	8	10	12	14	16
Y	4	5	6	7	8

55) If the difference between Mohsen's age and Khaled's age is 4 years, and Mohsen is older than Khaled, write the equation that expresses the previous situation. If Khaled's age is 16 years, find Mohsen's age

56) Using the following table using the two variables x and y , where x is an independent variable, write the equation that expresses the table:

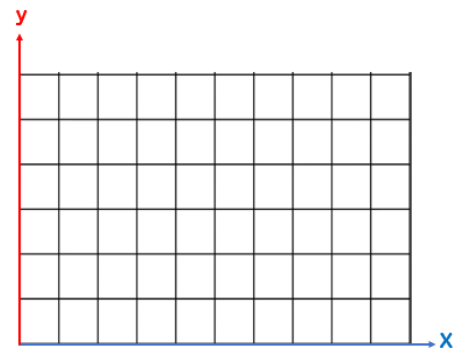
X	3	4	5	6	7
Y	0	1	2	3	4

57) If the rule is add 0.8, write the equation that expresses this using the two variables x and y , where x is an independent variable. If $x = 2.7$, find the value of y ?

58) Hanaa bought a set of notebooks; if the price of the notebook is 7 pounds, assuming that x represents the number of notebooks and y is the price of the notebooks. Write the equation that expresses the previous situation, then graph it.

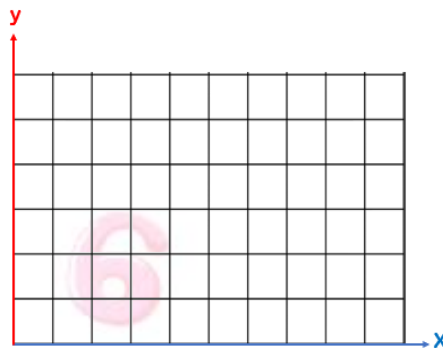


59) Mervat bought a set of cakes; if the price of the piece is 5 pounds, assuming that x represents the number of pieces and y is the price of the pieces. Write the equation that expresses the previous situation, then graph it.



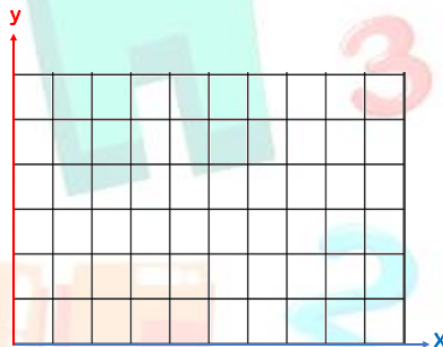
60) If the price of 5 cans of juice is 30 pounds and x is the number of cans and y is the total price, write the equation that expresses the situation then graph it.

.....

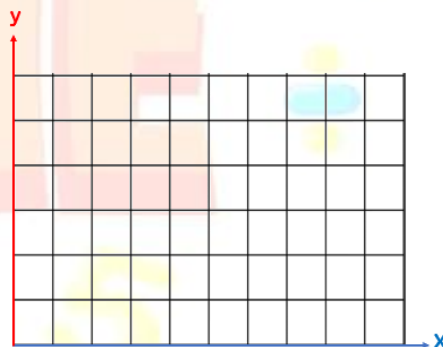


61) If the price of 3 apples is 30 pounds and x is the number of apples and y is the total price, write the equation that expresses the situation then graph it.

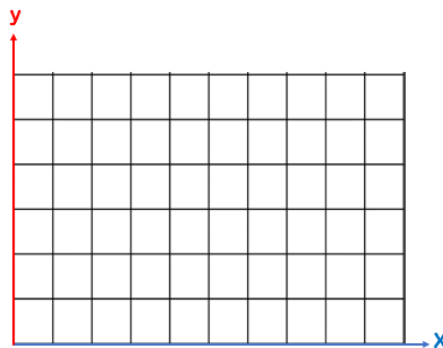
.....



62) Graph the equation: $y = x - 1$



63) Graph the equation: $y = 2x + 3$



November ExercisesFor more steps
watch **Q1: Choose the correct answer**

1) $2^3 = \dots\dots\dots$

☐ (a) 9☐ (b) 8☐ (c) 6☐ (d) 5

2) The first step to simplify $30 - 7 + 3^2$ is

☐ (a) subtraction☐ (b) division☐ (c) exponent☐ (d) addition

3) $4 \times 5 + 3^2 = \dots\dots\dots$

☐ (a) 68☐ (b) 29☐ (c) 56☐ (d) 11

4) $92 - 24 \div 4 + 11 = \dots\dots\dots$

☐ (a) 26☐ (b) 5☐ (c) 28☐ (d) 97

5) The value of the expression: $7 \div (10x - 4)$ when $x = 0.5$

☐ (a) 2☐ (b) 1☐ (c) 7☐ (d) 5

6) $1^5 = \dots\dots\dots$

☐ (a) 5☐ (b) 1☐ (c) 0☐ (d) 4

7) To find the value of the expression: $5 + 3 \times 4^2$ which operation is performed first?

☐ (a) $5 + 3$ ☐ (b) 3×4 ☐ (c) 4^2 ☐ (d) $4 - 10$

8) All of the following algebraic expressions are equivalent to the algebraic expression $2(6x + 5)$ except

☐ (a) $12x + 10 + 5$ ☐ (b) $5x + 7x + 10$ ☐ (c) $10x + 2x + 10$ ☐ (d) $12x + 10$

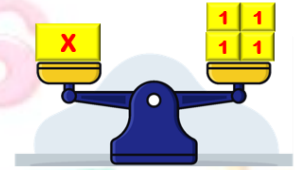
9) The value of A in the equation $A - 7 = 15$ is

- (a) 8 (b) $\frac{15}{7}$ (c) 105 (d) 22

10) Which of the following equations has a solution of 8

- (a) $y - 4 = 12$ (b) $d + 2 = 10$ (c) $x + 1 = 7$ (d) $a - 1 = 9$

11) Which of the following equations represents the corresponding two-pan balance



- (a) $4x$ (b) $x + 4$ (c) $4x = 1$ (d) $x = 4$

12) If the depth of the swimming pool does not exceed 5 meters, which of the following could be the depth of the pool?

- (a) 6.8 (b) 8 (c) 4 (d) 10

13) Ahmed reads at least 30 pages daily. Which of the following can express the number of pages Ahmed reads per day?

- (a) 15 (b) 40 (c) 29 (d) 25

14) The expression that expresses x as greater than or equal to 7 is

- (a) $x > 7$ (b) $x < 7$ (c) $x \leq 7$ (d) $x \geq 7$

15) The number 5 is one of the solutions to the inequality

- (a) $x > 5$ (b) $x < 5$ (c) $x < 7$ (d) $x > 7$

16) Which of the following does not belong to the solution set of the inequality: $X < 8$ in Z

- (a) -9 (b) -7 (c) 8 (d) 5

17) An equation is a mathematical sentence that includes a relation between two mathematical expressions

- (a) $>$ (b) $=$ (c) $<$ (d) $\leq$

18) The dependent variable in the equation: $y = 3x + 2$ is

- (a) 2 (b) 3 (c) x (d) y

19) The independent variable in the equation: $y = 4x - 5$ is

- (a) -5 (b) 4 (c) x (d) y

20) In the equation: $y = 3 + x$, the symbol x represents

- (a) independent (b) dependent (c) coefficient (d) constant

21) In the equation: $y = 8x + 1$, if $x = 1.5$, then y equals

- (a) 11 (b) 10.5 (c) 12 (d) 13

22) If x and y are variables and x is the independent variable, the equation that expresses the rule (multiply by 5 then add 3) is

- (a) $x = 5y + 3$ (b) $y = 5 + 3x$ (c) $y = 5x + 3$ (d) $y = 3x + 3$

23) Mona recorded the total cost of electricity consumed in a month d and the number of kilowatt hours they consumed in the same month r . the cost d represents

- (a) dependent (b) independent (c) coefficient (d) constant

24) The number of notebooks you can buy depends on

- (a) amount of money you have (b) the location of library
(c) name of your school (d) your address

25) The number of problems you solve m and the time required to solve n , then the dependent variable is

- (a) number of problems m (b) number of problems n
(c) time solve m (d) time solve n

26) Maryam spent 40 pounds to buy 5 pens, the equation that expresses the relation between the number of pounds y and the number of pens x is

- (a) $y = x + 8$ (b) $y = x + 5$ (c) $y = 8x$ (d) $y = x - 8$

27) The smallest integer that satisfies the inequality: $x > -6$ is

- (a) -7 (b) -5 (c) -8 (d) -4

Q2: Answer the following**Find the result of the following**

1) $16 \div 4 + 5^2$ **29**.....

2) $8 \times 2^2 - 2 \times 5$ **22**.....

3) $3 [(2^2 + 4) + (1 + 3^2)] \times 2$ **108**.....

4) $3 \times [(5 - 2) + 3]^2$ **108**.....

5) $5 + 3^2 \times 2 + 50 \div 5$ **33**.....

6) $3 + 6 \times (5 + 4) \div 3$ **21**.....

7) $(2 + 4) \times 7 - 2^3 \div 8$ **41**.....

8) $(6^2 + 4) \div (9 - 5)$ **10**.....

9) $(8^2 \div 4 - 5) \times 3 + 2$ **35**.....

10) $3 \times 4^2 - 7 \times (4 + 1)$ **13**.....

11) find the value of: $4 + 9 - (2x + 8 - 5)$ if $x = 2$ **6**.....

12) find the value of: $7(y^2 - 4) - 10$ if $y = 4$ **74**.....

13) find the value of: $3 \times d^3 + 3(6 - 3)^2$ if $d = 2$ **51**.....

14) find the value of: $3(k^2 - 6)$ if $k = 4$ **30**.....

15) $7 + 6(m^2 - 3)$ if $m = 4$ **85**.....

16) $(7 + 3) \div 2 \times 3 - 2^3$ **7**.....

17) $36 \div 4 + 3^2 \times 2$ **27**.....

18) $2 - [(7 - 3) - 2^2]$ **2**.....

19) Are the two algebraic expressions $(2x + 6)$ and $2(x + 3)$ equivalent?

.....**First expression = 8**.....

.....**Second expression = 8**.....

.....**Yes, the two expressions are equivalent**.....



20) Are the two algebraic expressions $2x + 5$ and $x + 5 + x$ equivalent?

First expression = 9

If $x = 2$

Second expression = 9

Yes, the two expressions are equivalent.

21) Are the two algebraic expressions $3x + 2$ and $2(x + 2)$ equivalent?

First expression = 11

If $x = 3$

Second expression = 10

No, the two expressions are not equivalent.

22) Are the two algebraic expressions $4x + 4$ and $2x + 2(x + 2)$ equivalent?

First expression = 8

If $x = 1$

Second expression = 8

Yes, the two expressions are equivalent.

23) Are the two algebraic expressions $x + 3x + 4$ and $2(2x + 1) + 2$ equivalent?

First expression = 24

If $x = 5$

Second expression = 24

Yes, the two expressions are equivalent.

24) Are the two algebraic expressions $6(2x + 3)$ and $12x + 18$ equivalent?

First expression = 66

If $x = 4$

Second expression = 66

Yes, the two expressions are equivalent.

Solve the following equations:

25) $12 + y = 45$ $Y = 33$

26) $v - 21 = 85$ $V = 106$

27) $5x + 6 = 26$ $X = 4$

28) $7x - 8 = 20$ $X = 4$

29) $\frac{1}{4}x - 8 = 4$ $X = 48$

30) $\frac{1}{2}n = 3$ $n = 6$

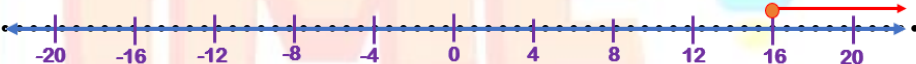
31) $f - 12 = 15$ $F = 27$

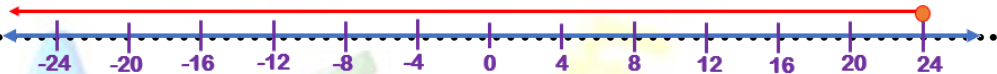
32) $5 + p = 19$ $P = 14$

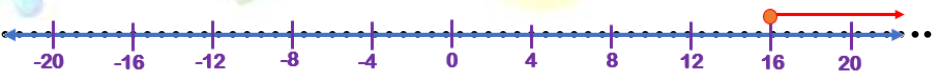
33) Write inequality that express x is greater than or equal to -3 $X \geq -3$

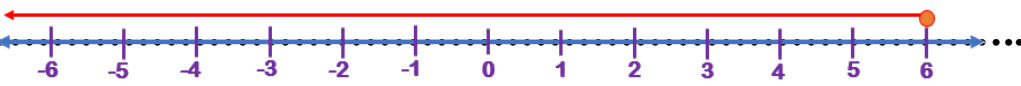
34) A train car can hold a maximum of 48 persons at most. State 3 possible number of persons who can ride the train car? $48, 45, 40$

35) Write 3 possible solutions to the inequality: $x < 9$ in Z and represent it on the number line. $8, 7, 6$


36) Write 3 possible solutions to the inequality: $x > 15$ in Z and represent it on the number line: $16, 17, 18$


37) Write 3 possible solutions to the inequality: $x \leq 24$ in Z and represent it on the number line: $24, 23, 22$


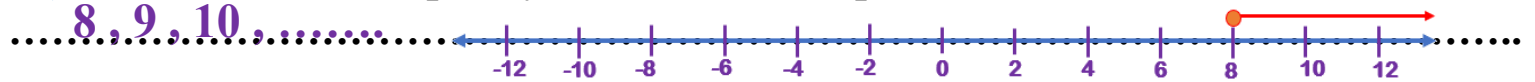
38) Mention 3 possible solutions to the inequality $x > 15$ in Z and represent it on the number line: $16, 17, 18$


39) Mention 3 possible solutions to the inequality $x \leq 6$ in Z and represent it on the number line: $6, 5, 4$


40) Write what the inequality $x > 5$ in Z and represent it on the number line.

..... $6, 7, 8, \dots$


41) Write what the inequality $x \geq 8$ in $\mathbb{Z}$ and represent it on the number line.



42) If the number of problems that Adam solved yesterday was more than 20 problems, mention 3 possible solutions represent the number of problems that Adam solved?25, 30, 35.....

43) If the rule is multiply by 2 and add 7, write the equation that expresses this using the two variables x and y , where x is the independent variable, and if $x = 3$, find the value of y ?The equation is: $y = 2x + 7$
The value of $y = 13$

44) If the rule is multiply by 3 and add 5, write the equation that expresses this using the two variables x and y , where x is the independent variable, and if $x = 2$, find the value of y ?The equation is: $y = 3x + 5$
The value of $y = 11$

45) If the rule is multiply by 6 and add 4, write the equation that expresses this using the two variables x and y , where x is the independent variable, and if $x = 4$, find the value of y ?The equation is: $y = 6x + 4$
The value of $y = 28$

46) If the rule is add 2 then multiply by 3, write the equation that expresses this using the two variables x and y , where x is the independent variable. If $x = 3$, find the value of y ?The equation is: $y = (x + 2) \cdot 3$
The value of $y = 15$

47) If the rule is add 5 then multiply by 2, write the equation that expresses this using the two variables y and x , where x is the independent variable. If $x = 4$, find the value of y ?The equation is: $y = (x + 5) \cdot 2$
The value of $y = 18$

48) If the rule is add 0.7 then multiply by 3, write the equation that expresses this using the two variables x and y where x is the independent variable, and if $x = 2$, find the value of y ?The equation is: $y = (x + 0.7) \cdot 3$
The value of $y = 8.1$

49) State the dependent and independent variables if the food bill is m and the number of meals is n ?Dependent is m / independent is n

50) Identify the dependent and independent variables if the price of the pants that Amjad bought is t and the number of pants is k ?

.....Dependent is t / independent is k

51) Determine the dependent and independent variables if the number of meals the restaurant sells is n and the profit it earns is a ?

.....Dependent is a / independent is n

52) From the following table, using the two variables x and y , where x is the independent variable, write the equation that expresses the table:

....The equation is: $x + 2 = y$

For more steps
watch 

X	5	6	7	8	9
Y	7	8	9	10	11

53) Using the following table using the two variables x and y , where x is an independent variable, write the equation that expresses the table:

.....The equation is: $3x = y$

X	0.5	1	1.5	2	2.5
Y	1.5	3	4.5	6	7.5

54) Using the following table using the two variables x and y , where x is an independent variable, write the equation that expresses the table:

....The equation is: $X \div 2 = y$

X	8	10	12	14	16
Y	4	5	6	7	8

55) If the difference between Mohsen's age and Khaled's age is 4 years, and Mohsen is older than Khaled, write the equation that expresses the previous situation. If Khaled's age is 16 years, find Mohsen's age

Khaled's age + 4 = Mohsen's age

Mohsen's age = 20 years old

56) Using the following table using the two variables x and y, where x is an independent variable, write the equation that expresses the table:

The equation is: $x - 3 = y$

X	3	4	5	6	7
Y	0	1	2	3	4

For more steps
watch 

57) If the rule is add 0.8, write the equation that expresses this using the two variables x and y, where x is an independent variable. If $x = 2.7$, find the value of y?

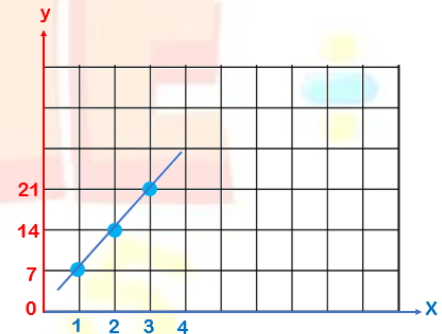
The equation is: $x + 0.8 = y$

The value of y = 3.5

58) Hanaa bought a set of notebooks; if the price of the notebook is 7 pounds, assuming that x represents the number of notebooks and y is the price of the notebooks. Write the equation that expresses the previous situation, then graph it.

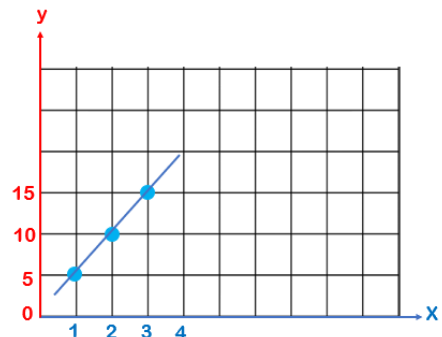
The equation is: $7x = y$

X	1	2	3
Y	7	14	21



59) Mervat bought a set of cakes; if the price of the piece is 5 pounds, assuming that x represents the number of pieces and y is the price of the pieces. Write the equation that expresses the previous situation, then graph it.

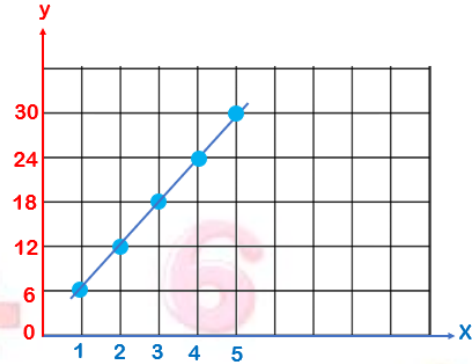
The equation is: $5x = y$



60) If the price of 5 cans of juice is 30 pounds and x is the number of cans and y is the total price, write the equation that expresses the situation then graph it.

...The equation is: $6x = y$...

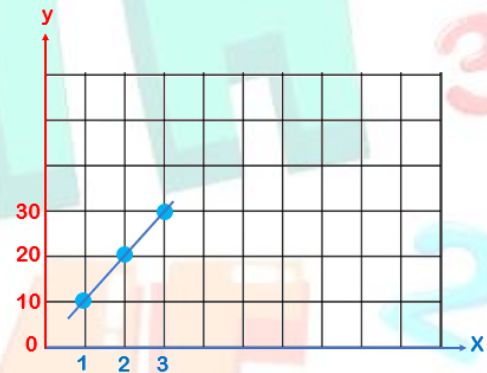
X	1	2	3	4	5
Y	6	12	18	24	30



61) If the price of 3 apples is 30 pounds and x is the number of apples and y is the total price, write the equation that expresses the situation then graph it.

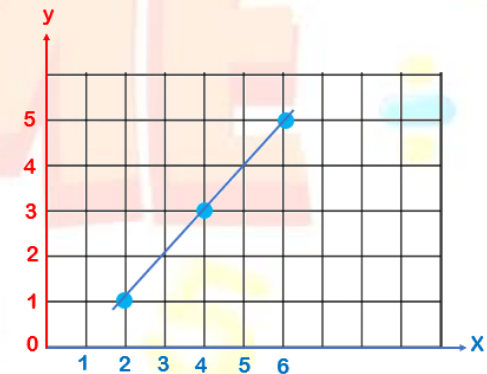
The equation is: $10x = y$...

X	1	2	3
Y	10	20	30



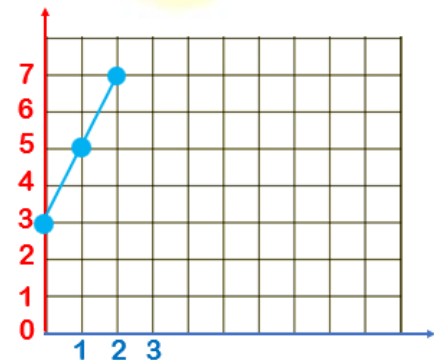
62) Graph the equation: $y = x - 1$

X	2	4	6
Y	1	3	5



63) Graph the equation: $y = 2x + 3$

X	0	1	2
Y	3	5	7



حمل الآن

مجاناً وحصرياً

المراجعة رقم (7)

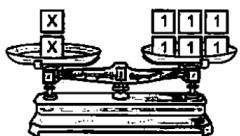
اختبار شهر نوفمبر



Choose the correct answer:

1	If: $x + 3 = 7$, then $x = \dots\dots$ a 3 b 4 c 7 d 10
2	If: $x \leq 5$, then x may = a 10 b 9 c 8 d 5
3	If: $x = 5$, then $2x + 4 = \dots\dots$ a 2 b 4 c 10 d 14
4	The constant of the expression $5x + 2y + 7$ is a 5 b 2 c 7 d x, y
5	The number of terms of the expression $2a + 3b - 5$ is a 1 b 2 c 3 d -5
6	The coefficients of the expression $5x + 2y - 4$ is a x b y c -4 d 5, 2
7	Twice the sum of a number and five is a $2x + 5$ b $2x - 5$ c 2×5 d $2(x + 5)$
8	Subtract 5 from k is written as a $5 - k$ b $k - 5$ c $5k$ d $k + 5$
9	9 squared = a 9×2 b 9^4 c 9^2 d 9×4
10	$3 + 2 \times 5 = \dots\dots$ a 25 b 15 c 13 d 30
11	$5 + (2 - 1)^2 = \dots\dots$ a 5 b 6 c 7 d 8
12	$9^0 + 9 = \dots\dots$ a 9 b 10 c 18 d 81
13	$1^9 + 2^0 = \dots\dots$ a 2 b 3 c 11 d 10



14	$5 \times 5 \times 5 \times 5 = 5^{\dots}$ a 2 b 3 c 4 d 5
15	$12 + (\dots) \times 2$ is called numerical expression. a $2x + 1$ b $3y - 5$ c $12 \div 3$ d $3k \div 3$
16	The equation that represents the opposite model is  a $x + 2 = 6$ b $2x = 6$ c $x - 2 = 6$ d $x + 2 = 5$
17	 is called an equation. a $3x + 4 = 7$ b $5x - 2 < 5$ c $3x > 21$ d $5x \leq 10$
18	 is called an inequality. a $3x + 4 = 7$ b $5x - 2 = 5$ c $3x > 21$ d $5x = 10$
19	5 belongs to the solution of the inequality a $x > 5$ b $x < 5$ c $x > 7$ d $x < 9$
20	3 belongs to the solution of the inequality a $x > 3$ b $x < 3$ c $x \geq 3$ d $x < 2$
21	The volume of a cube of edge length 5 cm is a 5^2 b 5^3 c 5×6 d 5×4
22	The first operation you will perform to evaluate the expression $2 + (9 - 7)^2$ is ... a addition b subtraction c exponent d otherwise
23	Ali saved n pounds; his father gives him 25 pounds. Ali has pounds now. a $n - 25$ b $n + 25$ c $25n$ d $n \div 25$
24	The value of the expression $3x + 5$ for $[x = 5]$ is a 5 b 10 c 15 d 20
25	Ahmed bought x books for 20 pounds each. He paid a $20 + x$ b $20 - x$ c $20x$ d $20 \div x$



26

If: $4n = 12$, then $3n = \dots$

- (a) 1 (b) 3 (c) 6 (d) 9

27

If: $x + 3 = 9$, then $\frac{1}{2}x = \dots$

- (a) 3 (b) 6 (c) 9 (d) 12

28

If: $m = 10$, then $m = \frac{1}{2} \dots$

- (a) 5 (b) 10 (c) 20 (d) 40

29

If: $\frac{m}{2} = 3$, then $m = \dots$

- (a) 2 (b) 3 (c) 5 (d) 6

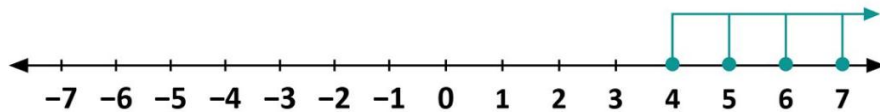
30

The inequality that represents the natural numbers is

- (a) $x > 0$ (b) $x < 0$ (c) $x \leq 0$ (d) $x \geq 0$

31

The inequality that represents the following solution is



- (a) $x > 3$ (b) $x < 3$ (c) $x \leq 3$ (d) $x \geq 3$

Complete:

1

$3^2 = \dots$

2

$2 + 3 \times 5 = \dots$

3

If: $m = 2$, then $3m + 1 = \dots$

4

If: $x = 3$, then $2^x - 3 = \dots$

5

$5^2 - 4 \times 5 = \dots$

6

If: $3y - 2 = 13$, then $y = \dots$

7

3 squared =

8

$7 \times 7 \times 7 = 7^{\dots}$

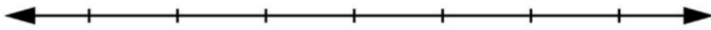
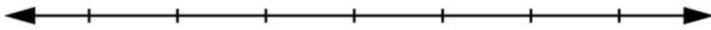


- 9** The verbal form of $3 + x$ is
- 10** The verbal form of $2x - 5$ is
- 11** If: $x \leq 3$, then,, are solutions of the inequality.
- 12** The like terms in the expression $(5x + 3y + 4x + 1)$ are and

Essay Problems:

- 1** Evaluate the expression $7 + 3(x^2 - 3)$ at $[x = 2]$

- 2** Hoda has 30 pounds in her money box, she saves 10 pounds daily.
 (a) Write an algebraic expression represents that situation.
 (b) The total money after 6 days.
- 3** Ali and Omar has 100 ponds, Ali has x pounds. Omar has pounds.
- 4** Write the algebraic expression of: "twice m added to 3 is 13"

- 5** Solve the following equations:
- | | |
|--------------------------------------|---------------------------------|
| $4m = 12$
.....
..... | $x + 3 = 8$
.....
..... |
| $\frac{1}{5}m = 2$
.....
..... | $2m - 4 = 10$
.....
..... |
- 6** List 3 solutions of each inequality, then represent them on the number line:
- (a) $N > 1$,, 
- (b) $M \leq -3$,, 



حمل الآن

مجاناً وحصرياً

المراجعة رقم (8)

اختبار شهر نوفمبر



Model (1)

Question 1 : Choose the correct answer :

- ① The value of the expression $7 \div (10 \times -4)$ when $X = 0.5$
 - (a) 2
 - (b) 1
 - (c) 7
 - (d) 5
- ② The dependent variable in the equation $y = 3 \times +2$ is
 - (a) 2
 - (b) 3
 - (c) X
 - (d) y
- ③ The first operation you perform in the expression : $2 \times (4^2 - 2) + 5$ is the
 - (a) Multiplication
 - (b) exponent
 - (c) subtraction
 - (d) Addition
- ④ If $X + 4 = 7$, then $3X = \dots\dots$
 - (a) 3
 - (b) 6
 - (c) 9
 - (d) 12
- ⑤ If $y = 2 + X$, then (..... , 6) satisfies the equation .
 - (a) 3
 - (b) 2
 - (c) 4
 - (d) 5
- ⑥ In the equation : $y = 4 \times -3$, if the output is 5 , then the input is.....
 - (a) 1
 - (b) 3
 - (c) 2
 - (d) 4
- ⑦ The cube of 5 equals
 - (a) 3×5
 - (b) $5 + 3$
 - (c) 5^3
 - (d) 3^5
- ⑧ The additive inverse of the number 6^2 is
 - (a) -6
 - (b) 12
 - (c) 36
 - (d) -36
- ⑨ Which of the following algebraic expressions is equivalent to $2(y + 4)$?
 - (a) $2y + 4$
 - (b) $y + 8$
 - (c) $2y + 8$
 - (d) $y + 6$

Question 2 : Answer the following questions :

- ① Are the two algebraic expressions: $2X+6$ and $2(x+3)$ equivalent ?
- ② Find the value of the algebraic expression :
 $(12 + 3X) \div 5$ when $X=1$

3 Write 3 possible solutions to the inequality $X \leq 6$ in Z and represent it on the number Line .

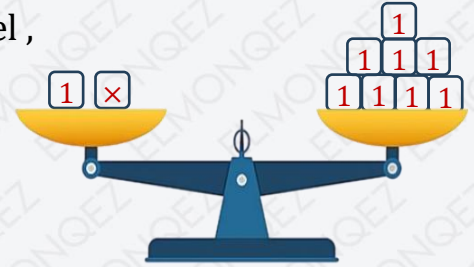
4 Find the result of the following :

A) $16 \div 4 + 5^2$

B) $3 \times [(5 - 2) + 3]^2$

5 Write the equation that represents the following model , then find the value of X :-

- Equation is
- Value of X =



6 Solve the following equations :-

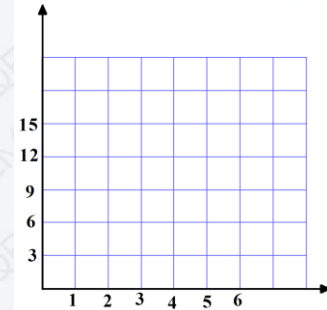
a) $3X + 5 = 11$

b) $9x = 27$

7 Complete the following tables , then make the graph the equation :-

$y = 3X$

X	1	2	3	4
Y	.....	.....	.....	.....
(X, y)	(... ,...)	(... ,...)	(... ,...)	(... ,...)



Model (2)

Question 1 : Choose the correct answer :

1 The ordered pair $(6 ,)$ satisfies the equation : $y = 5X - 2$

a 30

b 32

c 54

d 28

2 The number doesn't belong to the solutions of the inequality $y < 2$

a 1

b 2

c -1

d 0

- 3 If $2y = 8$, then $y + 2 = \dots\dots$
- (a) 9 (b) 6 (c) 4 (d) 9
- 4 The dependent variable in the algebraic equation : $b = \frac{1}{2}a + 3$ is
- (a) 4 (b) $\frac{1}{2}$ (c) b (d) A
- 5 " 5 times m added to 6 equal n" is equation is
- (a) $5m + 6 = n$ (b) $5n + 6 = m$ (c) $6m + 5 = n$ (d) $6n + 5 = m$
- 6 In the equation : $X + 3 = y$, if the input is 10, then the output is
- (a) 13 (b) 7 (c) 8 (d) 11
- 7 The first step to simplify $30 - 7 + 3^2$ is.....
- (a) Subtraction (b) Division (c) The exponent (d) Addition
- 8 All of the following algebraic expressions are equivalent to the algebraic expression $2(6X + 5)$ except
- (a) $12X + 10 + 5$ (b) $5X + 7X + 10$ (c) $10X + 2X + 10$ (d) $12X + 10$
- 9 In the equation $y = 8X + 1$, if $X = 1.5$, then y equals....
- (a) 11 (b) 10.5 (c) 12 (d) 13

Question 2 : Answer the following questions :

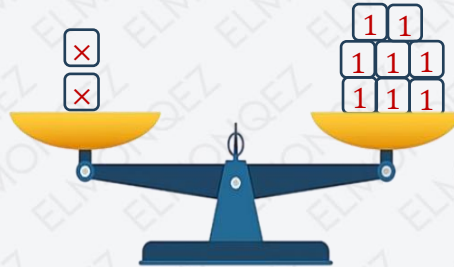
- 1 Find the value of $3(k^2 - 6)$ if $k = 4$
- 2 Solve the following equations :
- A) $\frac{1}{4}X - 8 = 4$
B) $f - 12 = 15$
- 3 Write 3 possible solutions to the inequality $X \geq -3$ IN z and represent it on the number Line

4 Find the result of the following

A) $3 \times 4^2 - 7 \times (4 + 1)$

B) $20 \div 2^2 + 2 \times 6$

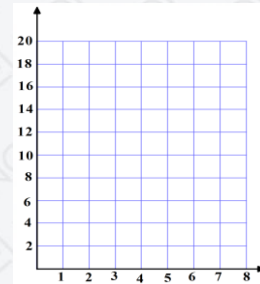
5 The equation of the following balance scale is and



6 Are the two algebraic expressions $x+3x+4$ and $2(2x+1)+2$ equivalent ?

7 Complete the following tables , then make the graph the equation : $y = 3X - 1$

x	1	3	5	7
Y	.....	.....	.....	.....
(x ,y)	(... ,...)	(... ,...)	(... ,...)	(... ,...)



Model (3)

Question 1 : Choose the correct answer :

1 The exponential form of a number with base 5 and exponent 3 is

- (a) 5^3 (b) 3^5 (c) 15 (d) 3^3

2 Which of the following algebraic expressions is equivalent to $3(x+5)$?

- (a) $2X + 5$ (b) $3X + 15$ (c) $2X + 15$ (d) $3X + 5$

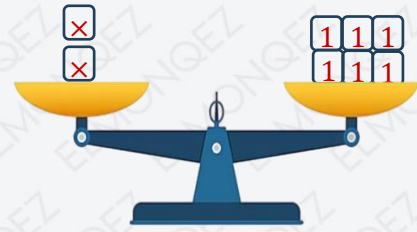
3 The smallest Integer that satisfies the inequality $X \geq -6$ is

- (a) -1 (b) -6 (c) -5 (d) 0

- 4 In the equation: $y = 2X + 1$ the independent variable is
- (a) Y (b) 2 (c) X (d) 1
- 5 The expression that expresses X as greater than or equal to 6 is
- (a) $X > 6$ (b) $X < 6$ (c) $X \leq 6$ (d) $X \geq 6$
- 6 Which of the following equations has a solution of 7
- (a) $y - 4 = 12$ (b) $d + 3 = 10$
(c) $X + 1 = 7$ (d) $A - 1 = 9$
- 7 The value of the expression $5n - 4$ at $n = 3$ is
- (a) 11 (b) 4 (c) 7 (d) 10
- 8 The ordered pair that satisfies the equation : $y = 2X + 1$ is
- (a) (1,1) (b) (1,2) (c) (1,3) (d) (1,4)
- 9 Double of a added to 2 equals 10" as an equation is
- (a) $2a - 2 = 10$ (b) $2a + 2 = 10$ (c) $a - 2 = 10$ (d) $a + 2 = 10$

Question 2 : Answer the following questions :

- 1 If $y = 2X + 5$, find the value of y for $X = 3$
- 2 If the rule is add 2 then multiply by 3 , write the equation that expresses this using the two variables y and X , where X is the independent variable . if $x = 3$, find the value of y ?
- 3 Are the algebraic expressions $2(X + 2)$ and $3X + 2$ equivalent ?
- 4 Solve the following equations :
A) $5 + P = 19$
B) $4C = 20$



5

Complete the following :

1) If $|-5| = X$, then $X = \dots$

2) If $6y = 18$, then $\frac{1}{3}y = \dots$

3) The equation that represents the opposite figure is

6

Find the result of the following :

1) $(2 + 4) \times 7 - 2^3 \div 8$

2) $9 \times 5 - 3^3$

7

Write two possible integers that could be a solution of the inequality : $X < 4$

Model (4)

Question 1 : Choose the correct answer :

1

The solution of the equation: $2X - 1 = 9$ is

(a)

5

(b)

6

(c)

0

(d)

4

2

$2^3 = \dots$

(a)

6

(b)

5

(c)

9

(d)

8

3

The independent variable in equation $y = 4X$

(a)

Y

(b)

X

(c)

4

(d)

$4X$

4

The base of 6^5 is

(a)

5

(b)

6

(c)

13

(d)

30

5

$10 + (5 - 3) \times 2^3 \div 4 = \dots$

(a)

24

(b)

14

(c)

11

(d)

41

- 6 half the number B add to 5 is
- (a) $2B + 5$ (b) $2B - 5$
- (c) $\frac{1}{2}B - 5$ (d) $\frac{1}{2}B + 5$
- 7 In the equation : $y = 3X + 14$, the ordered pair (1,b) satisfies the equation , then b =
- (a) 8 (b) 12 (c) 17 (d) 19
- 8 Which of the following does not belong to the solution set of the inequality $X < 8$ in Z....
- (a) -9 (b) -7 (c) 8 (d) 5
- 9 In the equation : $y = X + 3$, if the output is 4 , then the input is
- (a) 0 (b) 1 (c) 2 (d) 11

Question 2 : Answer the following questions :

- 1 Find the result of : $(15 - 2) \times 3 \times 4^2 + 2$
- 2 Solve the equation :
 $7 + 2X = 15$
- 3 Find the value of :
 $3 \times d^3 + 3(6 - 3)^2$ if $d=2$
- 4 If the rule is multiply by 2 and add 7 , write the equation that expresses this using the two variables X and y , where X is the independent variable , and if $X=3$, find the value of y ?
- 5 Are the algebraic expressions $2X+5$ and $X+5+X$ equivalent ?

6 Complete the following table according to the equation :

$$y = 3X - 2$$

X	1	3	7	10	11
y	....	....	....	....	....

7 Complete the following :

1) If $3d=9$, then $d+19 = \dots$

2) The additive inverse of $3^2 = \dots$

3) The base of 8^2 is ... and its exponents is ...

Model (5)

Question 1 : Choose the correct answer :

1 The number of notebook you can buy depends on

(a) amount of money you have

(b) The location of the library

(c) name of your school

(d) Your address

2 The number 5 is one of the solutions to the inequality

(a) $X > 5$

(b) $X < 5$

(c) $X < 7$

(d) $X > 7$

3 If $n+5=12$, then $n = \dots\dots\dots$

(a) 6

(b) 7

(c) 8

(d) 17

4 If the power is 5 and the base is 4 , then the exponential image is

(a) 5^4

(b) 4^4

(c) 5^5

(d) 4^5

5 "y equals the product of n and 12" equation is

(a) $y = 12 + n$

(b) $y = 12n$

(c) $y = 12 - n$

(d) $n = 12y$

6 The ordered pair (2,a) satisfies the equation : $y = X^2 - 2$, then $a = \dots\dots$

(a) 2

(b) 3

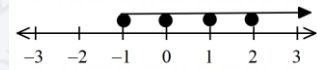
(c) 4

(d) 5

7 In the equation $X = 4Y + 3$ the independent variable is

- (a) X (b) y (c) 3 (d) 4

8 The inequality that represents the following graph is



- (a) $X < -1$ (b) $X \geq -1$ (c) $X < -1$ (d) $X \leq -1$

9 If $X + 3 = 7$, then $\frac{1}{4}X = \dots$

- (a) 1 (b) 2 (c) 4 (d) 5

Question 2 : Answer the following questions :

1 Find the result of :

$(5 \times 9 - 2a) + 5^2$ when $a=10$

2 Solve each of the following equations:

A) $\frac{1}{2}n = 3$

B) $7X - 8 = 20$

3 Using the following table using the two variables X and y , where X is an independent variable, write the equation that expresses the table :

X	3	4	5	6	7
y	0	1	2	3	4

4 Write 3 possible solutions To the inequality $X \geq -2$ in Z

5 Write the algebraic expression : the sum of 5 times b and 3

6

Write a verbal phrase for each of the following :

A) $2n + 6 = m$

B) $X + 3 = Y$

7

Complete :-

1) If $y = X - 5$ and $X = 8$ then $y = \dots\dots\dots$

2) $3^3 = \dots\dots\dots$

3) If $2(a - 3) = 4$, then the value of $a = \dots\dots\dots$

Model (1)

Question 1 : Choose the correct answer :

- ① The value of the expression $7 \div (10 \times -4)$ when $X = 0.5$
 - (a) 2
 - (b) 1
 - (c) 7
 - (d) 5
- ② The dependent variable in the equation $y = 3 \times +2$ is
 - (a) 2
 - (b) 3
 - (c) X
 - (d) y
- ③ The first operation you perform in the expression : $2 \times (4^2 - 2) + 5$ is the
 - (a) Multiplication
 - (b) exponent
 - (c) subtraction
 - (d) Addition
- ④ If $X + 4 = 7$, then $3X = \dots\dots$
 - (a) 3
 - (b) 6
 - (c) 9
 - (d) 12
- ⑤ If $y = 2 + X$, then $(\dots\dots, 6)$ satisfies the equation .
 - (a) 3
 - (b) 2
 - (c) 4
 - (d) 5
- ⑥ In the equation : $y = 4 \times -3$, if the output is 5, then the input is.....
 - (a) 1
 - (b) 3
 - (c) 2
 - (d) 4
- ⑦ The cube of 5 equals
 - (a) 3×5
 - (b) $5 + 3$
 - (c) 5^3
 - (d) 3^5
- ⑧ The additive inverse of the number 6^2 is
 - (a) -6
 - (b) 12
 - (c) 36
 - (d) -36
- ⑨ Which of the following algebraic expressions is equivalent to $2(y + 4)$?
 - (a) $2y + 4$
 - (b) $y + 8$
 - (c) $2y + 8$
 - (d) $y + 6$

Question 2 : Answer the following questions :

- ① Are the two algebraic expressions: $2X+6$ and $2(x+3)$ equivalent ?

(solution) $\rightarrow$ equivalent

- ② Find the value of the algebraic expression :

$(12 + 3X) \div 5$ when $X=1$

(solution)

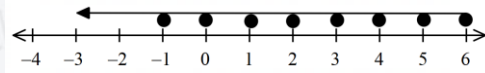
$(12 + 3 \times 1) \div 5 = 3$

3

Write 3 possible solutions to the inequality $X \leq 6$ in Z and represent it on the number Line .

$X = 6$ or $x = -1$ or $X = 3$

(solution)



4

Find the result of the following :

A) $16 \div 4 + 5^2$

B) $3 \times [(5 - 2) + 3]^2$

(solution)

A) $4 + 25 = 29$

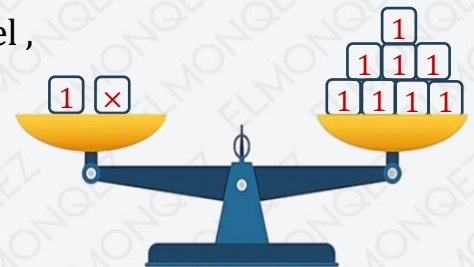
B) $3 \times [3 + 3]^2$

$= 3[6]^2 = 3 \times 36 = 108$

5

Write the equation that represents the following model , then find the value of X :-

- Equation is $X + 1 = 8$
- Value of $x = 7$



6

Solve the following equations :-

c) $3X + 5 = 11$

d) $9x = 27$

(solution)

a) $3X = 11 - 5$

$\frac{3X}{3} = \frac{6}{3}$

$X = 2$

b) $\frac{9X}{9} = \frac{27}{9}$

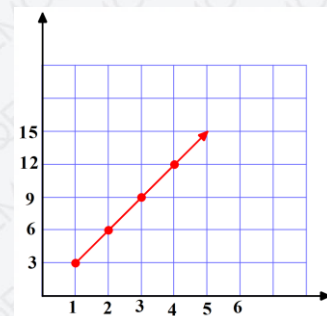
$X = 3$

7

Complete the following tables , then make the graph the equation :-

$y = 3X$

X	1	2	3	4
Y	3	6	9	12
(X, y)	(1,3)	(2,6)	(3,9)	(4,12)



Model (2)

Question 1 : Choose the correct answer :

- 1 The ordered pair (6 ,) satisfies the equation : $y = 5x - 2$
 - (a) 30
 - (b) 32
 - (c) 54
 - (d) 28
- 2 The number doesn't belong to the solutions of the inequality $y < 2$
 - (a) 1
 - (b) 2
 - (c) -1
 - (d) 0
- 3 If $2y = 8$, then $y + 2 = \dots\dots\dots$
 - (a) 9
 - (b) 6
 - (c) 4
 - (d) 9
- 4 The dependent variable in the algebraic equation : $b = \frac{1}{2}a + 3$ is
 - (a) 4
 - (b) $\frac{1}{2}$
 - (c) b
 - (d) A
- 5 " 5 times m added to 6 equal n" is equation is
 - (a) $5m + 6 = n$
 - (b) $5n + 6 = m$
 - (c) $6m + 5 = n$
 - (d) $6n + 5 = m$
- 6 In the equation : $X + 3 = y$, if the input is 10 , then the output is
 - (a) 13
 - (b) 7
 - (c) 8
 - (d) 11
- 7 The first step to simplify $30 - 7 + 3^2$ is.....
 - (a) Subtraction
 - (b) Division
 - (c) The exponent
 - (d) Addition
- 8 All of the following algebraic expressions are equivalent to the algebraic expression $2(6X + 5)$ except
 - (a) $12X + 10 + 5$
 - (b) $5X + 7X + 10$
 - (c) $10X + 2X + 10$
 - (d) $12X + 10$
- 9 In the equation $y = 8X + 1$, if $X = 1.5$, then y equals....
 - (a) 11
 - (b) 10.5
 - (c) 12
 - (d) 13

Question 2 : Answer the following questions :

- ① Find the value of $3(k^2 - 6)$ if $k = 4$

(solution)

$$3(4^2 - 6) = 30$$

- ② Solve the following equations :

A) $\frac{1}{4}X - 8 = 4$

B) $f - 12 = 15$

(solution)

A) $\frac{1}{4}X = 4 + 8 = 12$

$X = 48$

B) $f = 15 + 12$

$f = 27$

- ③ Write 3 possible solutions to the inequality $X \geq -3$ IN z and represent it on the number Line

(solution)

$x = -3$ or $x = 2$ or $x = -1$



- ④ Find the result of the following

A) $3 \times 4^2 - 7 \times (4 + 1)$

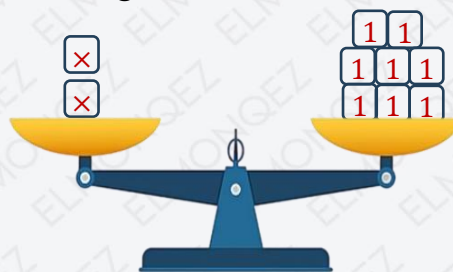
B) $20 \div 2^2 + 2 \times 6$

(solution)

A) $3 \times 16 - 7 \times 5 = 48 - 35 = 13$

B) $20 \div 4 + 12 = 5 + 12 = 17$

- ⑤ The equation of the following balance scale is $2x = 8$ and $x = 4$



6 Are the two algebraic expressions $x+3x+4$ and $2(2x+1)+2$ equivalent ?

(solution)

When $x=2$

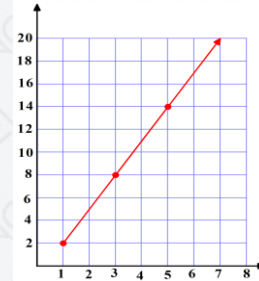
1) $X + 3X + 4 = 2 + 3 \times 2 + 4 = 12$

2) $4X + 2 + 2 = 8 + 4 = 12$

$\therefore$ equivalent

7 Complete the following tables , then make the graph the equation : $y = 3X - 1$

x	1	3	5	7
Y	2	8	14	20
(x,y)	(1,2)	(3,8)	(5,14)	(7,20)



Model (3)

Question 1 : Choose the correct answer :

1 The exponential form of a number with base 5 and exponent 3 is

(a) 5^3

(b) 3^5

(c) 15

(d) 3^3

2 Which of the following algebraic expressions is equivalent to $3(x+5)$?

(a) $2X + 5$

(b) $3X + 15$

(c) $2X + 15$

(d) $3X + 5$

3 The smallest Integer that satisfies the inequality $X \geq -6$ is

(a) -1

(b) -6

(c) -5

(d) 0

4 In the equation: $y = 2X + 1$ the independent variable is

(a) Y

(b) 2

(c) X

(d) 1

5 The expression that expresses X as greater than or equal to 6 is

(a) $X > 6$

(b) $X < 6$

(c) $X \leq 6$

(d) $X \geq 6$

- 6 Which of the following equations has a solution of 7
- (a) $y - 4 = 12$ (b) $d + 3 = 10$
- (c) $X + 1 = 7$ (d) $A - 1 = 9$
- 7 The value of the expression $5n - 4$ at $n = 3$ is
- (a) 11 (b) 4 (c) 7 (d) 10
- 8 The ordered pair that satisfies the equation : $y = 2X + 1$ is
- (a) (1,1) (b) (1,2) (c) (1,3) (d) (1,4)
- 9 Double of a added to 2 equals 10" as an equation is
- (a) $2a - 2 = 10$ (b) $2a + 2 = 10$ (c) $a - 2 = 10$ (d) $a + 2 = 10$

Question 2 : Answer the following questions :

- 1 If $y = 2X + 5$, find the value of y for $X = 3$
- (solution)
- $y = 2 \times 3 + 5 = 6 + 5 = 11$
- 2 If the rule is add 2 then multiply by 3 , write the equation that expresses this using the two variables y and X , where X is the independent variable . if $x = 3$, find the value of y ?
- (solution)
- $\rightarrow y = (X + 2) \times 3$
- When $X = 3$
- $y = (3 + 2) \times 3 = 5 \times 3 = 15$
- 3 Are the algebraic expressions $2(X + 2)$ and $3X + 2$ equivalent ?
- (solution)
- $\therefore$ not equivalent

4 Solve the following equations :

A) $5 + P = 19$

B) $4C = 20$

(solution)

A) $5 + P = 19$

$P = 19 - 5$

$P = 14$

B) $\frac{4c}{4} = \frac{20}{4}$

$C = 5$

5 Complete the following :

1) If $|-5| = X$, then $X = 5$

2) If $6y = 18$, then $\frac{1}{3}y = 1$

3) The equation that represents the opposite figure is $2X = 6$



6 Find the result of the following :

1) $(2 + 4) \times 7 - 2^3 \div 8$

2) $9 \times 5 - 3^3$

(solution)

1) $6 \times 7 - 8 \div 8 = 42 - 1 = 41$

2) $45 - 27 = 18$

7 Write two possible integers that could be a solution of the inequality : $X < 4$

(solution)

$X = 3$ or $X = -2$

Model (4)

Question 1 : Choose the correct answer :

1 The solution of the equation: $2X - 1 = 9$ is

a) ☒ 5

b) ☐ 6

c) ☐ 0

d) ☐ 4

2 $2^3 = \dots\dots\dots$

a) ☐ 6

b) ☐ 5

c) ☐ 9

d) ☒ 8

- 3 The independent variable in equation $y = 4X$
- (a) Y (b) **X** (c) 4 (d) $4X$
- 4 The base of 6^5 is
- (a) 5 (b) **6** (c) 13 (d) 30
- 5 $10 + (5 - 3) \times 2^3 \div 4 = \dots\dots$
- (a) 24 (b) **14** (c) 11 (d) 41
- 6 half the number B add to 5 is
- (a) $2B + 5$ (b) $2B - 5$
- (c) $\frac{1}{2}B - 5$ (d) **$\frac{1}{2}B + 5$**
- 7 In the equation : $y = 3X + 14$, the ordered pair (1,b) satisfies the equation , then b =
- (a) 8 (b) 12 (c) **17** (d) 19
- 8 Which of the following does not belong to the solution set of the inequality $X < 8$ in Z....
- (a) -9 (b) -7 (c) **8** (d) 5
- 9 In the equation : $y = X + 3$, if the output is 4 , then the input is
- (a) 0 (b) **1** (c) 2 (d) 11

Question 2 : Answer the following questions :

- 1 Find the result of : $(15 - 2) \times 3 \times 4^2 + 2$

(solution)

$$= 13 \times 3 \times 16 + 2$$

$$= 624 + 2 = 626$$

2

Solve the equation :

$$7 + 2X = 15$$

(solution)

$$2X = 15 - 7 = 8$$

$$\frac{2X}{2} = \frac{8}{2}$$

$$X=4$$

3

Find the value of :

$$3 \times d^3 + 3(6 - 3)^2 \text{ if } d=2$$

(solution)

$$= 3 \times 2^3 + 3(3)^2$$

$$= 3 \times 8 + 3 \times 9 = 24 + 27 = 51$$

4

If the rule is multiply by 2 and add 7 , write the equation that expresses this using the two variables X and y , where X is the independent variable , and if X=3 , find the value of y ?

(solution)

$$\rightarrow y = 2X + 7$$

When X=3

$$\therefore y = 2 \times 3 + 7 = 6 + 7 = 13$$

5

Are the algebraic expressions $2X+5$ and $X+5+X$ equivalent ?

(solution)

When X=2

$$1) 2 \times 2 + 5 = 4 + 5 = 9$$

$$2) 2 + 5 + 2 = 9$$

$\therefore$ equivalent

6

Complete the following table according to the equation :

$$y = 3X - 2$$

X	1	3	7	10	11
y	1	7	19	28	31

7

Complete the following :

- 4) If $3d=9$, then $d+19 = 22$
 5) The additive inverse of $3^2 = -9$
 6) The base of 8^2 is 8 and its exponents is 2

Model (5)

Question 1 : Choose the correct answer :

1

The number of notebook you can buy depends on

- (a) **amount of money you have** (b) The location of the library
 (c) name of your school (d) Your address

2

The number 5 is one of the solutions to the inequality

- (a) $X > 5$ (b) $X < 5$ (c) **$X < 7$** (d) $X > 7$

3

If $n+5=12$, then $n= \dots\dots$

- (a) 6 (b) **7** (c) 8 (d) 17

4

If the power is 5 and the base is 4 , then the exponential image is

- (a) 5^4 (b) 4^4 (c) 5^5 (d) **4^5**

5

"y equals the product of n and 12" equation is

- (a) $y = 12 + n$ (b) **$y = 12n$** (c) $y = 12 - n$ (d) $n = 12y$

6

The ordered pair (2,a) satisfies the equation : $y = X^2 - 2$, then $a= \dots\dots$

- (a) **2** (b) 3 (c) 4 (d) 5

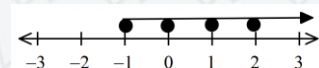
7

In the equation $X = 4Y + 3$ the independent variable is

- (a) X (b) **y** (c) 3 (d) 4

8

The inequality that represents the following graph is



- (a) $X < -1$ (b) **$X \geq -1$** (c) $X < -1$ (d) $X \leq -1$

9 If $X + 3 = 7$, then $\frac{1}{4}X = \dots$

a 1

b 2

c 4

d 5

Question 2 : Answer the following questions :

1 Find the result of :

$$(5 \times 9 - 2a) + 5^2 \text{ when } a=10$$

(solution)

$$= (45 - 20) + 25$$

$$25 + 25 = 50$$

2 Solve each of the following equations:

A) $\frac{1}{2}n = 3$

B) $7X - 8 = 20$

(solution)

A) $n = 6$

B) $\frac{7X}{7} = \frac{28}{7} \quad X = 4$

3 Using the following table using the two variables X and y, where X is an independent variable, write the equation that expresses the table :

X	3	4	5	6	7
y	0	1	2	3	4

(solution)

$$Y = X - 3$$

4 Write 3 possible solutions To the inequality $X \geq -2$ in Z

(solution)

$$X = -2 \text{ or } X = -1 \text{ or } X = 3$$

5 Write the algebraic expression : the sum of 5 times b and 3

(solution)

$$\rightarrow 5b + 3$$

6

Write a verbal phrase for each of the following :

A) $2n + 6 = m$

B) $X + 3 = Y$

(solution)

A) Twice n more 6 equals m

B) X added to 3 equals y

7

Complete :-

4) If $y = X - 5$ and $X = 8$ then $y = 3$

5) $3^3 = 27$

6) If $2(a - 3) = 4$, then the value of $a = 5$

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

